



Electronic Filing System
Submission Manual

ePAVE

for Assignments

Version 5.1d

Summer 2004





PART 1: A Quick Guide TO ePAVE 5.1d.....	4
PART 2: AN OVERVIEW OF EPAVE 5.1d.....	8
<i>SECTION 1: Introduction.....</i>	8
<i>SECTION 2: System Requirements.....</i>	8
<i>SECTION 3: Submission Restrictions.....</i>	9
<i>SECTION 4: Detailed Installation Instructions</i>	9
Special Installation Circumstances	11
What is EFS? What is ePAVE?	12
<i>SECTION 5: Key Steps in the Electronic Filing Process</i>	14
<i>SECTION 6: Using ePAVE 5.1d</i>	16
<i>SECTION 7: Contact Information</i>	27
Assignments	28
<i>Assignments: At a Glance</i>	28
<i>Install and Launch ePAVE.....</i>	29
<i>Create a Submission Action and Submission Folder</i>	30
Submission Action Screen	30
Submission Folder Screen.....	31
Submission Action Screen	32
Submission Projects Screen	33
<i>Providing Data in the Assignment Module.....</i>	34
Add Common Data Elements Screen	34
Assignment Screens	37
Fee Calculation Screen	52
Method of Payment Screen.....	53
Attach Files to Project Screen.....	56
Validate the Project Screen.....	59
Submit to USPTO Screen	61
Sending a package to the USPTO.....	63
Obtain Acknowledgment Receipt Screen	65
Exiting ePAVE or Preparing Another Submission	69



United States Patent and Trademark Office
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 2004

Dear User:

Thank you for using the Electronic Filing System (EFS) and its submission tool, ePAVE 5.1d, to file your patent application electronically.

The USPTO initiated the development of EFS to provide a means for applicants or their representatives to submit patent applications and related documents to the USPTO using the Internet. The use of the Electronic Filing System supports the USPTO strategic goal to integrate patent business practices with information technology to bring about effective use of electronic government as part of conducting patent business.

This user manual provides detailed instructions for using the ePAVE submission program, and also provides guidance including the system requirements, business context of use, and support available for the product. ePAVE is the software application that you use to bundle and transmit your documents to the USPTO.



PART 1: A QUICK GUIDE TO ePAVE 5.1D

- **Step 1** – Obtain ePAVE 5.1d software. The software can be downloaded from <http://www.uspto.gov/ebs/efs/downloads/downloadndx.htm> or provided on CD from the Patent Electronic Business Center by calling toll-free 1-866-217-9197. The ePAVE software has a built-in low level Public Key Infrastructure (PKI) certificate. This certificate may be used to file new utility and provisional applications. To file subsequent submissions, obtain a customer number and high level PKI digital certificate from the USPTO.

Full details are listed at the Electronic Business Center (EBC) site within the main web site of the USPTO at: www.uspto.gov/ebs.

- **Step 2** - Install ePAVE 5.1d.

Detailed installation instructions are listed in the overview, in Part 2 of this manual.

- **Step 3** – Launch ePAVE 5.1d.

Launch ePAVE by double-clicking the ePAVE icon from the desktop or by selecting ePAVE from the *Start* menu under *Programs*.

- **Step 4** – Begin to use ePAVE.

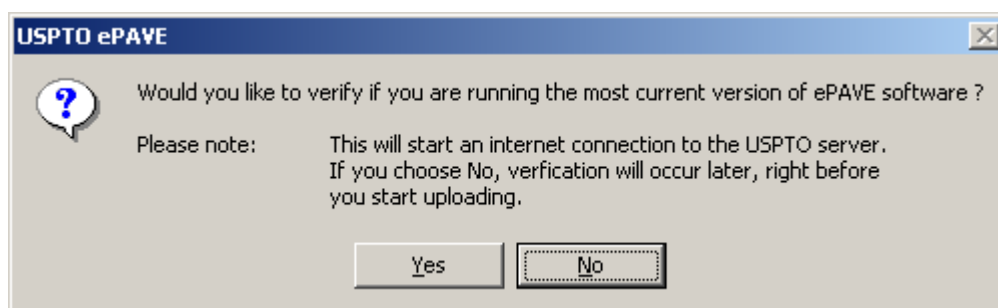
Immediately after launching ePAVE, users will see the ePAVE splash screen. Select *Next* at the bottom of the screen to proceed.



ePAVE Splash Screen

- **Step 5** – Ensure that the most current version of ePAVE is running.

A dialogue box will appear, asking: “Would you like to verify if you are running the most current version of ePAVE software?”

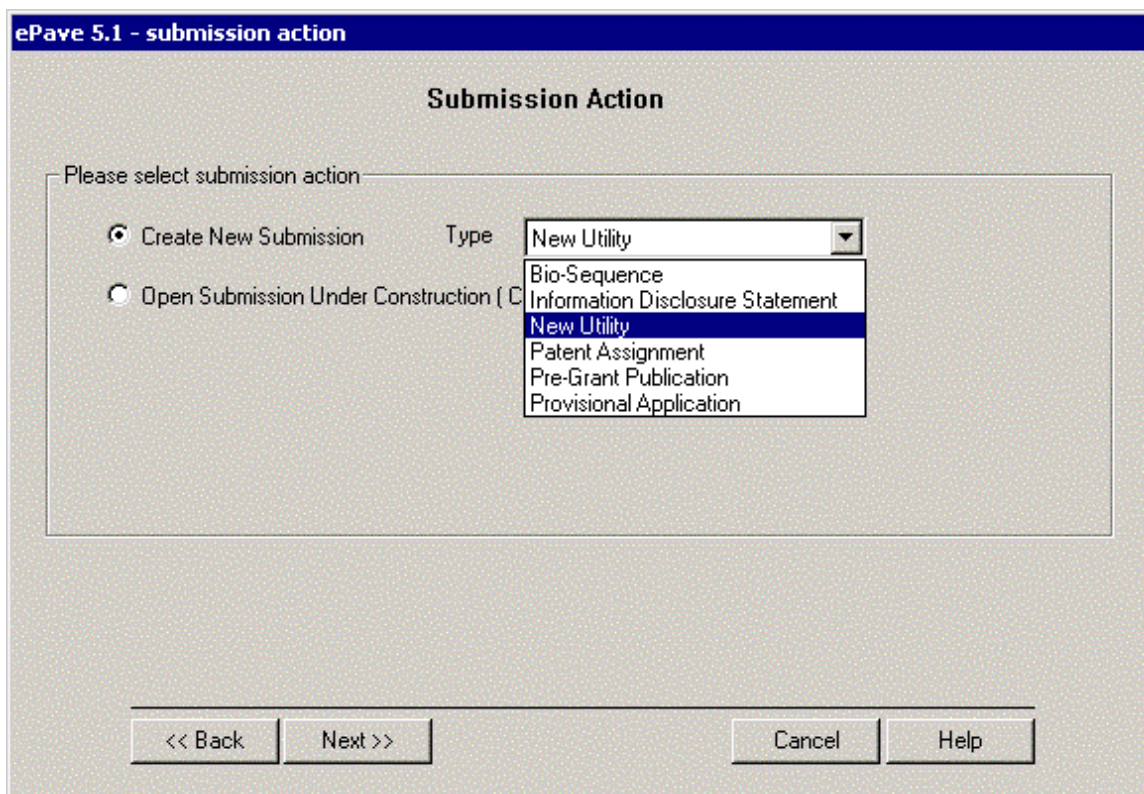


Version Verification dialogue box

Select **Yes** to verify now. Select **No** to verify later.

- **Step 6** – Begin creating a submission.

After verifying the version, the **Submission Action** screen is displayed. Users have the option of creating a new submission or opening a submission that has been started, but not completed. (A submission that has been started but not completed is listed as a Submission under Construction.)



Submission Action Screen

- **Step 7** – Choose one of the six submission types.

The drop-down menu of submission types is displayed in the **Submission Action** screen. The list displays an alphabetic list of the six submission types that can be filed in ePAVE. Users must choose from the following six submission types: bio-sequence listing, information disclosure statement, new utility, patent assignment, pre-grant publication, and provisional application.

NOTE: The new utility is the default submission type.

- **Step 8** – Complete data entry and create files appropriately for each submission type.



Each submission type has its own set of instructions that are available as separate documents or as one large manual. In order to fully understand the intricacies of each submission type, users are encouraged to review the manuals before using ePAVE. The manuals are available for download and are listed at the Electronic Business Center (EBC) site within the main web site of the USPTO at:

<http://www.uspto.gov/ebc/efs/downloads/documents.htm> .

- **Step 9** – Submit to USPTO and obtain acknowledgement receipt.

Using either the built-in low level PKI certificate or the USPTO provided high-level PKI certificate, a secure encrypted session is established with the USPTO server. When the completed submission is received by USPTO an acknowledgement receipt containing the application number, confirmation number, time and date of receipt, and additional information is returned. This acknowledgement receipt will serve as proof of what USPTO received.



PART 2: AN OVERVIEW OF EPAVE 5.1D

SECTION 1: Introduction

The following lists information about system requirements and limitations, and provides detailed installation instructions for installing and using the Electronic Filing System (EFS) and its submission tool, ePAVE 5.1d, to file patent applications electronically.

SECTION 2: System Requirements

Processor: 266 MHz or higher Pentium Processor 266 MHz or higher (or similar AMD Processor)

Memory: 128 MB RAM.

Screen Display: 1024 x 768 or higher

Browser: Microsoft Internet Explorer 5.0 Service Pack 3 or Microsoft Internet Explorer 5.5 Service Pack 2 with msxml upgraded to msxml 3.0 Service Pack 2. For more information on the msxml upgrade see:
<http://www.microsoft.com> and search for msxml.

Tiff Viewer Plug-In: AlternaTIFF v1.3.5 or higher for IE5.0, or AlternaTIFF v1.4 or higher for IE5.5 and higher. For information about the version of AlternaTIFF appropriate for your browser see <http://www.alternatiff.com>.

Free Hard Disk Space: 25 Megabytes is required for the ePAVE application alone.

Modem: Internet connection at 56 Kbps or faster

Operating System: Microsoft Windows 98SE, Windows ME, Windows2000 with Service Pack 2 or later, Windows NT 4.0 with Service Pack 6 or later or Windows XP with Service Pack 1

Applications: Word 2000, or Word XP including Office Assistant

PDF viewer: Adobe® Reader® or the PDF viewer of your choice

Graphics Package for TIFF image formatting

Printer Driver (s) must be up to date

Scanner: Any scanner capable of producing black and white TIFF images at 300 dpi with CCITT Group 4 compression



SECTION 3: Submission Restrictions

Any patent applications submitted to the USPTO through EFS will include one or more electronic files. The following limitations apply to the files that can be submitted in a single submission package.

Applications submitted electronically over the Internet: The total submission size must be 100 MB or less after compression. If the total submission size exceeds 100 MB, the submission should be copied to a CD-ROM or CD-R, accompanied by a paper copy of the transmittal (package-data.xml) and that CD and transmittal delivered to USPTO. Call the Electronic Business Center at 1-866-217-9197 for more information.

Any electronic submission is subject to the following limitations:

A new utility or provisional submission may include no more than 5 assignment coversheets.

An information disclosure statement may cite at most 50 U.S. patents and 50 U.S. published application citations.

A subsequently filed assignment submission may include a maximum of 15 cover sheets. Each cover sheet must reference at least one tiff image.

Images must be included as tiff image files in the following format: Black and white, 300 dpi, CCITT Group 4 compression or uncompressed, maximum size of 8 ½ by 11 inches.

SECTION 4: Detailed Installation Instructions

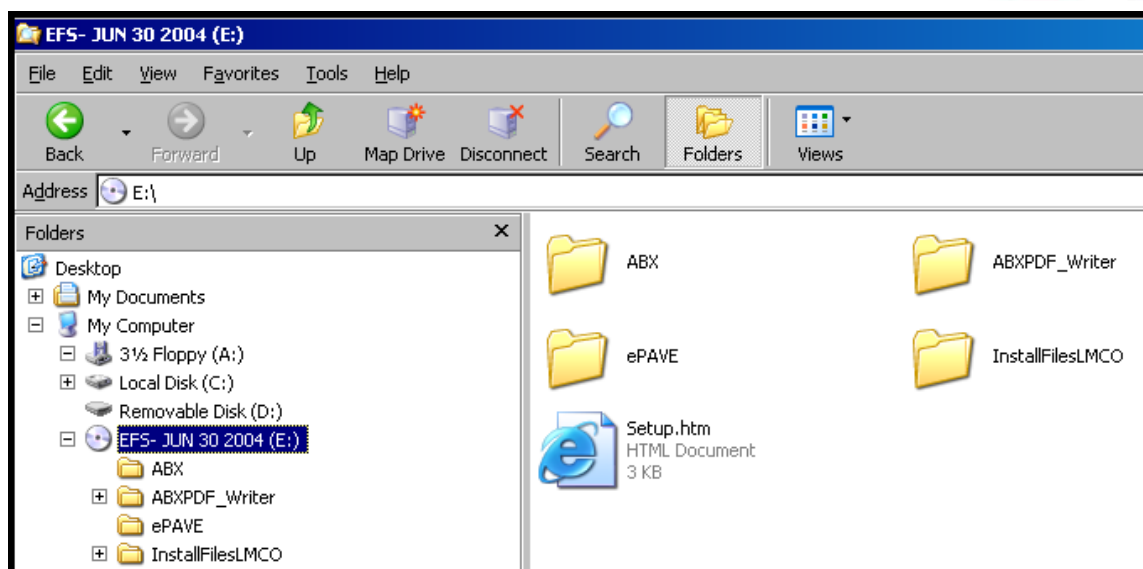
Obtaining ePAVE: CD-ROMs or the USPTO Web Site

Users can download ePAVE 5.1d from the Electronic Business Center (EBC) site within the main web site of the USPTO at: <http://www.uspto.gov/ebc/efs/downloads/downloadndx.htm>. The program is also provided on a CD-ROM supplied by the USPTO. Contact the Patent Electronic Business Center toll-free at 1-866-217-9197 to obtain a CD.

Installing from a CD-ROM:

Installation is easy!

- 1) Insert the EFS CD-ROM into your CD drive.
- 2) From **Windows Explorer** browse to the CD drive and launch the file named **Setup.htm**.



Windows Explorer Screen

This will display the setup window in your browser.

(1) **ePAVE** (Electronic Patent And Validation Engine)

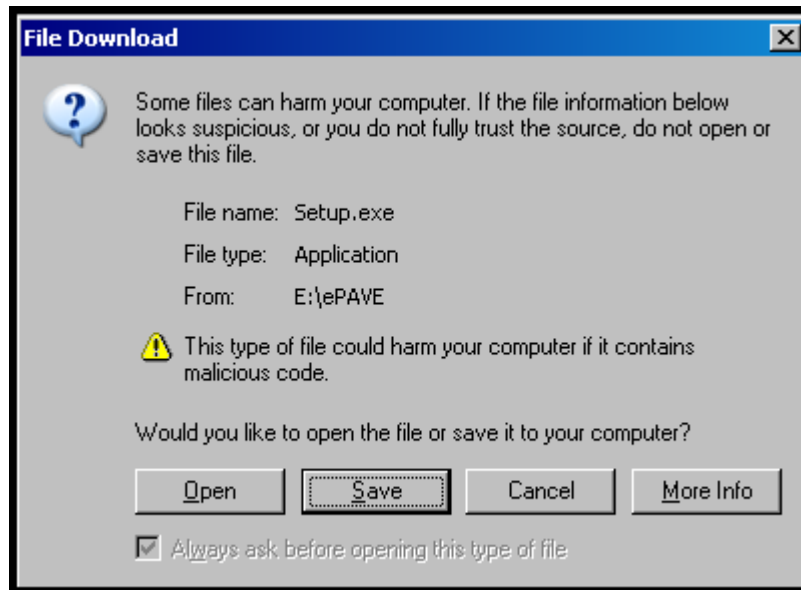
EFS electronic Packaging and Validation Engine (ePAVE) desktop software enables patent applicants and appointed practitioners to conduct real time electronic filing of select new utility and provisional patent applications. EFS also allows user to file four types of subsequent filings over the Internet. These subsequent file types are pre-grant publication submissions; information disclosure statements for pending applications, assignment documents for previously filed applications and patents, and submission of amino acid or nucleotide sequence listings required during prosecution of a pending biotechnology patent application.

Note: For users that already have ePAVE 5.1 (older version) installed on their desktop and have populated the Address Book, **please take a backup of the Address Book file located at C:\Program Files\USPTO\ePAVE\DEF\AddressBook.csv before installing ePAVE 5.1d** and then copy it back once the installation is complete, in order not to loose the Address Book data.

[\(Please click this link to install ePAVE version 5.1 d\)](#)

The Setup Screen

3) Scroll down to the ePAVE section and select the **Please click link to install ePAVE version 5.1d** hyperlink. This will launch the **File Download** window.



File Download Screen

- 4) Select the **Open** option from the **File Download** screen. This will launch the **InstallShield**.
- 5) Follow the instructions in the **InstallShield** screens. Select the **Repair** option from the **InstallShield** Welcome screen.
- 6) After installation reboot the computer.

Installing from the download:

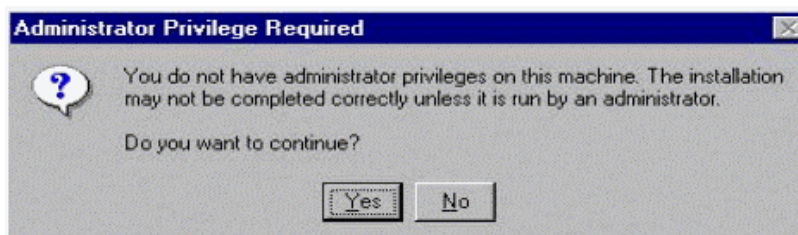
If ePAVE is downloaded from the USPTO website, the user should locate the installation file, setup.exe on the user's computer and install the file by double-clicking on the setup file.

NOTE: If a previous version of ePAVE is installed and the Address book contains many names and addresses, the user should make a back-up of the file C:\Program Files\USPTO\ePAVE\DEF\AddressBook.csv and copy it back in the same folder once the new version of ePAVE is installed.

Special Installation Circumstances

Networked Computers

ePAVE can be used with Internet connections on a network and with networked machines. In order to install ePAVE or some of its components, users will be required to have local administrator privileges. If users are unsure if they have these privileges, it is best to contact Information Technology staff. The installation program will offer a prompt during the installation process to indicate that local administrator privileges are required for installation.



Administrator Privilege dialog box

Although it is possible to use ePAVE in a network environment, users should carefully consider its effect on file management.

In a networked environment, application files created in ePAVE must reside in network storage that is mapped to all machines that are working with ePAVE using the same naming convention. All files should be in a dedicated folder for two reasons: to allow common access to the files from any PC on the network and to allow EFS to locate, attach, and bundle the files within the application during the final assembly of the submission into a package.

EFS stores all files from a single application together, based on their pathname. Thus, once the files have been stored, their location should not be changed.

Multiple Computers

The installation of ePAVE is subject to license agreements that set forth the terms to allow installation on one or more computers.

In order for ePAVE to upload an electronic submission properly, a digital certificate file must be transferred. Users may obtain a high-level digital certificate in a two-step process by requesting reference information from the USPTO and creating the certificates with the USPTO's Direct Security software after receiving access codes. A low-level digital certificate is built in to ePAVE and may be used for new utility and provisional submissions only.

There is no need to reinstall USPTO Direct on multiple machines because users may transfer their profile and the digital certificate file to a computer that will be used to file the patent application submission.

What is EFS? What is ePAVE?

EFS is designed around a common submission engine that presents data collection screens to the user to collect patent application information and create electronic patent application forms in eXtensible Markup Language (XML). The submission engine is a desktop software program called EFS electronic Packaging and Validation Engine (ePAVE). In addition to providing electronic forms, ePAVE allows the user to attach tagged, structured specification documents that includes links to applicable figure image and PDF files. Other patent application documents, such as a declaration or a power of attorney, may be attached as scanned single-page tiff image files or included as XML documents.



EFS electronic Packaging and Validation Engine (ePAVE) desktop software enables patent applicants and appointed practitioners to conduct real time electronic filing of select new utility and provisional patent applications. EFS also allows user to file four types of subsequent filings over the Internet. These subsequent file types are pre-grant publication submissions; information disclosure statements for pending applications, assignment documents for previously filed applications and patents, and submission of amino acid or nucleotide sequence listings required during prosecution of a pending biotechnology patent application.

Who may use EFS?

The USPTO authorizes select individuals to use EFS to file patent applications electronically. These authorized individuals include inventors, patent practitioners, assignees of record of the entire interest, and assignees of record of an undivided part interest. For more information see 37 C.F.R. 1.33(b).

Application Types Allowed

EFS allows submission of six filing types: new utility and provisional patent applications, pre-grant publication submissions, information disclosure statements and biosequence listings for pending patent applications, and assignment recordation documents for previously filed patent applications and patents.

To use EFS software to submit pre-grant publication filings, please refer to pre-grant publication regulations 37 CFR, §§ 1.211-1.221, for a description of the legal requirements.

A biosequence listing in computer readable form (CRF) may be included with a new utility or provisional application. Alternatively, if a pending utility patent application requires a nucleotide or amino acid sequence submission, the biosequence listing may be submitted as a separate follow-on filing. The submission software accepts ASCII Sequence Listing files created by the sequence listing authoring tool, PatentIn (as well as accommodating ASCII Sequence listing files created by other standard methods or editors). Refer to 37 CFR 1.824. The sequence listing shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats are accepted.

For new utility, provisional, and pre-grant publication submissions, EFS-ABX will create specification documents as eXtensible Mark-up Language (XML) tagged electronic documents. EFS-ABX will create two specification documents. The first is a fully marked-up XML document. This document will be used for pre-grant publication creation when the submission is a pre-grant publication submission. It is also used for automated security review for new utility and provisional submission. The second is a small XML document that contains reference to PDF files of the description, claims, abstract, and any drawings. This file will end with –pdf-wrap.xml. EFS-ABX creates an ABX package that contains all of these files and is password protected to ensure that the content of the fully marked-up XML and the content of the PDF files is consistent. The user may then use ePAVE submission software to attach and send the application specifications with any drawings to USPTO along with other patent application forms and files.



Note: The PDF files are the source documents for the official records in the Image File Wrapper system (IFW) of the specification, claims, abstract and drawings. It is important to review the PDF files to verify that they contain the same information as was entered into the Word source application file. The Word source document file is never transmitted to the USPTO, and cannot be relied upon as evidence of the contents of the application as filed.

The XML and TIFF files are the source documents for the bibliographic information used in the USPTO records, for the 18-Month Publication (PG-Pub) document and for other USPTO records respectively as submitted.

Using ePAVE submission software users may: author XML documents such as fee transmittal or application data sheet; attach electronic documents and image files in specified formats; and validate the completeness of the submission based on patent business rules. The ePAVE program automatically bundles, compresses, and digitally signs the submission package once the applicant or appointed practitioner enters an electronic signature and digital certificate authentication information. Using the digital certificate, the software automatically establishes a Secure Socket Layer encrypted session with the USPTO server and transmits the package to the USPTO. An acknowledgement receipt is displayed in real time at the filer's desktop after the submission package is received and validated at the USPTO without error.

SECTION 5: Key Steps in the Electronic Filing Process

The following procedure outlines the steps that must be completed in order to file a patent application electronically via EFS.

Step 1: Install ePAVE

Install the ePAVE tool.

Step 2: Obtain a PKI digital certificate

According to 35 U.S.C. Section 122 USPTO must maintain patent applications in confidence until publication. In order to comply with this law, the USPTO distributes software that supports secure communication between the USPTO, and applicants and practitioners.

As a result, the USPTO has implemented several electronic commerce projects that promote secure communications, including instituting rules to protect applicants when they file patent applications electronically and providing electronic access to pending patent applications to authorized persons via the Patent Application Information Retrieval (PAIR) system. USPTO has implemented public key infrastructure technology to provide the security of these systems. A PKI digital certificate is necessary to ensure the security of the electronic transmission of patent applications and is used to establish a Secure Socket Layer connection with the USPTO server for secure transmission of patent application information.

When filing a new utility or provisional patent application, users may use the low-level digital certificate that is built in to ePAVE. The low-level digital certificate is compatible with the



public key infrastructure that is implemented by the USPTO and allows secure communications between applicants and the USPTO. Low-level digital certificates may only be used to file new utility and provisional application submissions.

High-level digital certificates issued by the USPTO require an approval process. USPTO will also provide a version of Entrust Direct security software that is custom-made for the USPTO and is used to create the high-level digital certificate. Entrust Direct is compatible with the public key infrastructure that is implemented by the USPTO and enables secure communications among individual applicants, practitioners, and the USPTO.

Note: Obtaining a high level PKI certificate is recommended. It can be used to access application information in private PAIR and allows all six filing types to be submitted.

To find out how to obtain a PKI digital certificate, please contact the Electronic Business Center (EBC) for patents toll free at 866-217-9197 or via e-mail at ebc@uspto.gov.

Step 3: Format all files

Any patent application that is submitted to the USPTO via EFS must meet certain formatting requirements.

File Names

File names are limited to 25 characters and must be alphanumeric. The hyphen and period characters can be used in file names. The USPTO recommends using the 8.3 file-naming convention when naming files that will be used with ePAVE. This convention allows for file name to contain up to eight characters for the name of the file itself and three characters for the file extension and requires both components to be separated by a period. Here is an example of a file name that complies with the 8.3 file-naming convention: newfile1.xml.

Allowable characters in file and folder names include letters, numbers, hyphens (-), and periods (.). Special characters must not be included in file names, such as ampersands (&), commas (,), number signs (#), quotation marks ("), and spaces (). It is imperative that special characters not be used because they will cause errors that may affect the transmission of the patent application.

In naming the ePAVE folder that contains the submission files, the folder name must be different than the names of any other files or figures that are included in the submission.

Images

Since images are an integral part of patent applications, they must meet strict requirements before being submitted as part of a patent application. The USPTO has established the following requirements for images that apply to any patent application that is filed electronically.

All images must be scanned or converted into TIFF images and comply with the following format: a resolution of 300 dpi, black and white only, compressed with the CCITT Group 4



Compression or uncompressed, and a maximum size of 8 ½ by 11 inches. These formatting requirements apply to the following types of images:

Inline graphics (including complex chemical structures, math equations, tables, and custom characters). EFS-ABX automatically produces images that meet the requirements when the XML documents are exported.

Drawings (figures) – It is recommended that one Figure of drawing be included in each tiff file. EFS-ABX automatically produces images that meet the requirements when the XML documents are exported.

Declaration forms (These may also be submitted as XML files if they are created in ePAVE.)

Assignment documents

Small entity statements

Power of Attorney forms (These may also be submitted as XML files if they are created in ePAVE.)

These requirements for TIFF images will satisfy certain formal requirements set forth in 37 C.F.R. 1.84. When the USPTO processes patent applications that were submitted through EFS into IFW the images will be displayed as if printed on 8 1/2" x 11" paper. The margins will be as follows: top-1 inch; left-1 inch; right- ¾ inch; bottom- ¾ inch. These margins satisfy 37 C.F.R. 1.84(g).

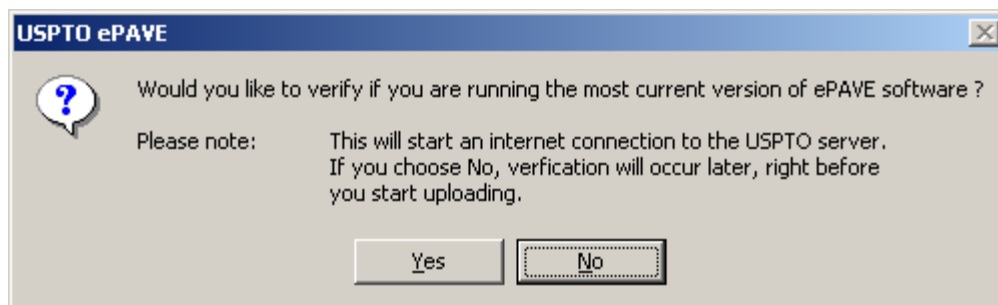
SECTION 6: Using ePAVE 5.1d

Introduction

The ePAVE submission engine is used to create a patent application (also referred to as a package), view and print it, validate it, and send it electronically to the USPTO.

Updating EFS Submission Program (ePAVE)

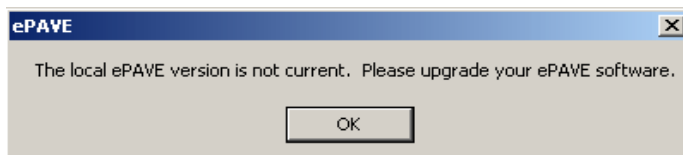
The USPTO will periodically release new versions of the ePAVE software. When this occurs, users will need to update the ePAVE software. In order to ensure that the most current version of ePAVE is running, ePAVE automatically provides the option to check the version each time ePAVE is launched.



ePAVE Version Verification

Select **Yes** to automatically launch an Internet connection and connect to the USPTO server. If the installed version is not the most recent, check the USPTO website at <http://www.uspto.gov/ebc/efs/index.html> to determine if a new version is available.

If the following error message is displayed after selecting **Yes**, the current version of ePAVE is not the most recent. Select **OK** on the Version error screen and go to the EFS website at <http://www.uspto.gov/ebc/efs/downloads/downloadndx.htm> to download the latest ePAVE software. Users who are unable to download the software should contact the Patent Electronic Business Center toll free at 1-866-217-9197 or at ebc@uspto.gov to receive the software on a compact disk. Updated versions of the EFS User Manuals are also available from this site.

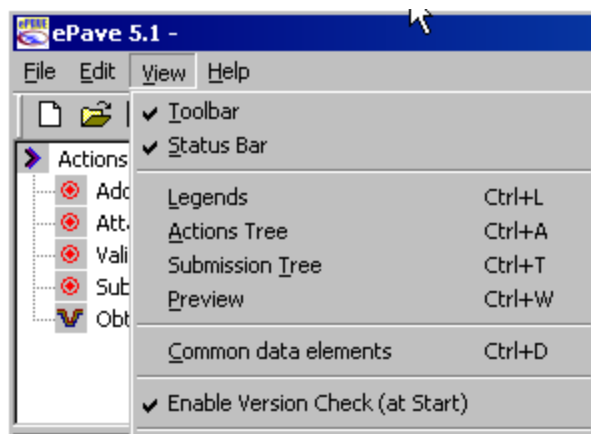


Version Error Screen

Select **No** on the Version Verification screen to launch ePAVE software without checking for the most recent version. After selecting **No**, a new submission may be created. After beginning the upload process, the ePAVE software will automatically check the version. If the installed version is not the most recent, check the USPTO website at <http://www.uspto.gov/ebc/efs/index.html> to determine if a new version is available.

Disable or Re-enable Version Checking at Startup

To disable ePAVE's automatic version checking on startup, deselect it from the **View** menu. Select the **Enable Version Check (at Start)** to toggle it on and off. The check mark indicates that version checking at startup is active. When this feature is disabled no version check occurs at startup.



Disable or Re-enable Version Checking

NOTE: You cannot disable the version check at upload feature. When ePAVE performs this check, it will only inform you whether or not your ePAVE version is the most current.

The ePAVE User Interface

The ePAVE interface includes the following components—menus, a toolbar, a data entry screen and navigation screens. The menus allow the user to perform various functions, including opening and closing documents, saving and printing documents, validating a submission, and sending it to the USPTO. The toolbar provides buttons that allow the user to perform various ePAVE tasks without using the menus. The screens contain the data fields where submission information that is sent to the USPTO is entered and allows the user to navigate through the submission according to the actions that the user wishes to perform, or to move from form to form.

The ePAVE Toolbar

The ePAVE toolbar is shown below:



ePAVE Toolbar

The following provides a list of the toolbar icons and their names, and also provides a description of the function of each icon.



- **New Icon.** Use this icon to begin a new EFS submission.



Open Icon. Use this icon to open an existing EFS submission file that was previously saved. Locate the existing submission folder in the directory path.



Save Icon. Use this icon to save the EFS submission information that has been entered so far.



Cut Icon. Use this icon to remove text from the selected text field.



Copy Icon. Use this icon to copy the selected text.



Paste Icon. Use this icon to paste text to the selected text field.



Print Icon. Use this icon to print the information on the active screen.



Help Icon. Use this icon to access help information for using ePAVE.



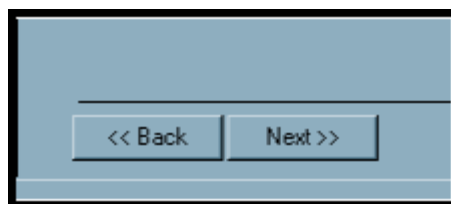
Toggle Legend Icon. Use this icon to display or hide the tree legend.

Navigating Through ePAVE

Users can navigate through ePAVE in a number of ways.

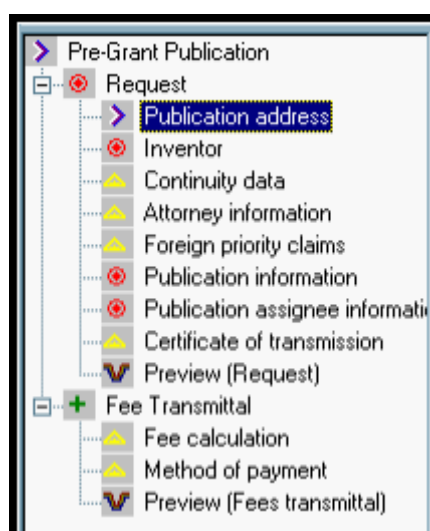
- A user may navigate by using a mouse and interacting with the graphical screen display provided and entering text from the keyboard or a user may navigate through the screens using keystrokes only.
- A user may move from screen to screen using the **Back** and **Next** buttons provided in the ePAVE wizard.
- A user may navigate through the screens by selecting a particular action from the **Actions tree**.
- A user may navigate to particular screens using the **Forms tree**.

New users may wish to walk through all the screens in ePAVE and would benefit from seeing all the screens. That user would likely use the ePAVE wizard navigation by using the **Next** and **Back** buttons to move through the application.



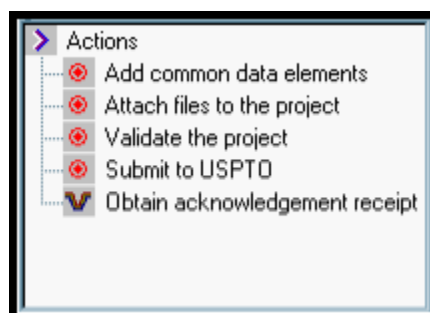
Back and Next buttons in the ePAVE wizard

More advanced users may wish to include information on specific screens only and would benefit from navigating via the **Forms tree**. Selecting a specific screen from the forms tree will display that screen and allow data entry into that screen.



Forms tree

Users may navigate by function using the **Actions tree** to perform a particular function, such as attaching or removing a file from the **Attach Files to Project** screen by selecting Attach files to the project from the **Actions** tree.



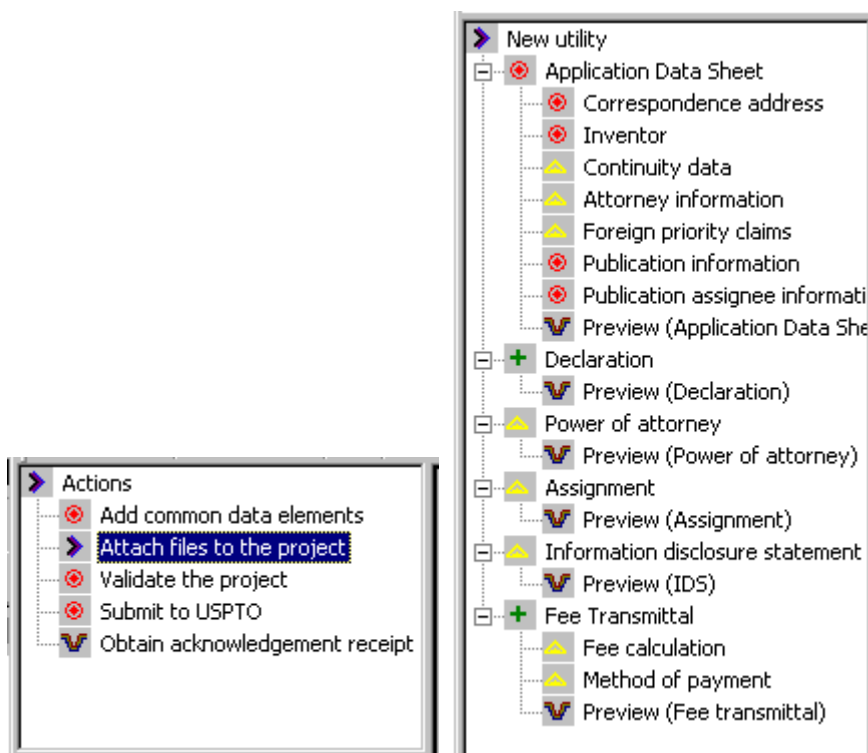
Actions tree



Keyboard and Mouse Navigation

Once a screen is displayed, a user can move through the data fields by using the **TAB** key on the keyboard or by clicking in each field with the mouse. Users can also move backwards through the fields by simultaneously pressing the **SHIFT** and **TAB** keys on the keyboard. Selections of radio buttons on the screens can be done using a mouse or by toggling through the choices using the up and down arrow keys. Check boxes can be checked or unchecked by clicking with the mouse or by using the space bar. Buttons on the screen can be pressed by clicking on them with the mouse or by using the space bar. For example, when a user wishes to move to the next screen, the user can select the **Next** button and press the space bar.


The ePAVE Trees



The Actions and Forms trees

The left side of each ePAVE screen includes the **Actions tree** with the **Forms tree** displayed beneath it.

Actions Tree

Selecting one of the items in the **Action Tree** activates a desired action. The Actions tree will indicate which action is being completed by displaying the purple arrow icon .

Add common data elements will launch the **Add Common Data Elements** screen where data common to many of the ePAVE-generated forms may be entered.

Attach files to the project will launch the **Attach Files to Project** screen where files may be attached to and removed from the submission. The contents of the submission may also be viewed in the **Attach Files to Project** screen.

Validate the project will launch the **Validate the Project** screen where the correctness and completeness of the submission can be determined. Error and warning messages displayed on this screen will help users ensure that a complete and correct data set is being sent to USPTO.

Submit to USPTO will launch the **Submit to USPTO** screen where comments about the submission may be entered and where electronic and digital signatures are provided. The **Send** button on this screen may be selected to begin transmission of the filing to the USPTO server.



Obtain Acknowledgement Receipt will launch the *Acknowledgement Receipt* view and allow printing of the acknowledgement receipt returned by USPTO after submission has occurred.

Forms Tree

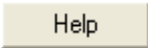
A user can navigate to particular screens in ePAVE using the **Forms Tree**.

XML forms are created in ePAVE by entering data on one or more screens. The screens associated with each form are listed in the ***Forms Tree***. Each of the ePAVE screens is represented by a symbol and a text branch in the ***Forms Tree***. A user can access the different screens by selecting the branch that corresponds to the desired screen. The specific Forms tree and screens that are available is dependent upon the type of submission being filed.

Once a screen is displayed, a user can move through the data fields by using the **TAB** key on the keyboard or by clicking in each field with the mouse. Users can also move backwards through the fields by simultaneously pressing the **SHIFT** and **TAB** keys on the keyboard. Selections of radio buttons can be on the screens can be done using a mouse or by toggling through the choices using the up and down arrow keys. Check boxes can be checked or unchecked by clicking with the mouse or by using the space bar. Buttons on the screen can be pressed by clicking on them with the mouse or by using the space bar. For example, when a user wishes to move to the next screen, the user can select the next button and press the space bar.

The ePAVE data entry screens must collect a minimum amount of information to ensure that the electronic patent application filing is complete and valid for examination and subsequent publication. All mandatory fields or sections in ePAVE are identified by bold type, while optional fields or sections are shown in regular type.

Help button

 The **Help** button in the lower right corner of each screen will bring up screen-specific help to assist a user in filling out patent application documents.

Legend

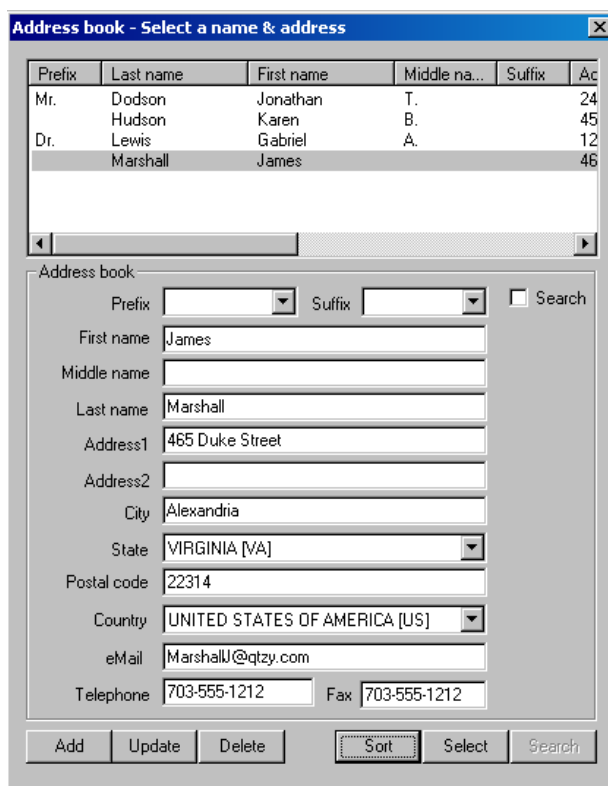
The meaning of the symbols in the trees can be displayed by viewing the Legend.



ePAVE legend

The information entered in the fields on each screen is automatically tagged as XML (extensible markup language) output.

Using the Address Book



Prefix	Last name	First name	Middle na...	Suffix	Ac
Mr.	Dodson	Jonathan	T.		24
	Hudson	Karen	B.		45
Dr.	Lewis	Gabriel	A.		12
	Marshall	James			46

Address book

Prefix Suffix ☐ Search

First name

Middle name

Last name

Address1

Address2

City

State

Postal code


Country

eMail

Telephone Fax

Address book

To facilitate the reuse of previously keyed data, ePAVE 5.1d offers an Address Book feature. In instances where name and address information must be entered, the user can reuse previously

keyed information by clicking on the **Ab** key,  to the right of the data fields. A user can enter a few letters of one of the names and select the **Search** key. The Address book will search for that name and offer matching or nearly matching names in the data field. A user can highlight the desired name, double-click on it or select the **Select** key, and the name and/or



address information for that address book entry will automatically be populated into the ePAVE screen.

Highlighting a particular field at the top of the data field and selecting the **Sort** key can sort entries in the address book.

Name and address information can be added to the address book by deselecting the **Search** check box and entering the desired data and selecting the **Add** key.

Name and address information can be edited and updated by deselecting the **Search** check box and highlighting an entry, editing the name and address in the data fields and selecting the **Update** key.

To delete an entry, deselect the **Search** check box and highlight the name and address in the data field and select the **Delete** key.

Saving a Submission

A user can save ePAVE submission documents at any time. Saving preserves patent application data so that it can be changed or printed at a later date. Use one of the following procedures to save the electronic files:

Select the **Save** icon on the toolbar. This immediately saves entered data.

OR

Go to the **File** menu and select **Save**.

The submission contents will be saved in the submission folder with a file extension of epv.

Printing in ePAVE

When application data sheet, fee transmittal, biosequence transmittal, information disclosure statement and assignment recordation forms are open, those forms may be printed when **Preview** is selected from the **Forms** Tree and the **Print** icon is selected or **Print** is selected from the **File** menu.

Forms may also be printed by highlighting the form in the **Attach Files to Project** screen and selecting **View**. Print the form by right clicking and selecting **Print** or by using the keyboard shortcut **Ctrl + P**.

Filing Large Submissions Using Compact Discs

If a user attempts to file a submission that exceeds the EFS system limit of 100 Megabytes, ePAVE generates an error message and advises the user to submit the large application on a compact disc (CD or CD-R). Submissions larger than 100MB cannot be submitted via the



Internet. If a large biotechnology sequence listing, table, or computer program listing is causing the large application size, these items may be submitted with the application according to the requirements of 37 C.F.R. 1.52 (e) with the large section on CD and the rest in paper. However, regardless of the cause of the large size of the submission, EFS can be used to file the application on CD. The process requires a compact disc recorder, and can only be used for submissions that fit on a single compact disc.

Before Saving to CD

Before saving the files and sending the CD to USPTO, verify that all declaration, power of attorney and small entity image files are compressed.

- Remove the image files from the submission in the ***Attach Files to Project screen*** in ePAVE.
- Open one of the images in an image-viewing tool.
- Specify the following settings for the image:
File type: TIFF
Color: Black & White
Compression: CCITT Group 4
Resolution: 300 dpi
- Save the image and repeat for each image file.

Saving a Submission on CD

If the submission is still larger than 100 MB after compressing image files as listed above, use the following procedure to submit packages larger than 100MB on CD:

- Print out the transmittal form from the ***Attach Files to Project*** screen by selecting the file including the suffix -pkgda.xml, selecting ***View*** and printing the form.
- Copy the submission folder that contains the entire application from the workstation to compact disc-recordable (CD-R) media.
- Wrap the CD in a hard case within a padded protective mailing envelope, and attach a copy of the transmittal form. Enclose a cover letter explaining that the submission contains an application that was too large to be submitted via the Internet. See 37 CFR 1.52 for more information on providing compact discs to USPTO.
- Hand carry or mail the CD-R and a copy of the paper transmittal form and cover letter to the USPTO. The submission may also be deposited with the US Postal Service under the Express Mail procedures of 37 CFR § 1.10.
- Keep a copy of the CD and transmittal form for your records.



Once the USPTO receives the CD in the mailroom, the date of receipt is recorded and the submission is uploaded to the EFS server, where the files are unzipped. The application files will then be processed as EFS submissions and an acknowledgement receipt will be mailed.

If the files contain large tables, sequence listings or computer program listings, the USPTO may not process the large files in IFW, but rather burn two CD-Rs of such data and treating them under the CD practice of 37 CFR 1.52(e) and treating the CD's as artifacts. If the file is an amino acid/ nucleotide sequence listing, then one additional copy of such a sequence listing will be created and sent to Scientific and Technology Information Center as the Computer Readable Form of the sequence listing. In any case, one CD is placed in the artifact file, and one is put in the CD repository.

USPTO Office of Initial Patent Examination's Electronic Application Review Office processes payment by credit card or deposit account in the same manner as an on-line submission. The files provided on CD are digitally signed, so the patent application data is protected during mailing and any storage time at the USPTO.

SECTION 7: Contact Information

Check the User Guide - This manual provides all of the information needed to use the ePAVE software. Please check the table of contents to locate information.

Check the Online Help - Select *Help* in the ePAVE application to review information about the version of ePAVE being used.

Check the EFS web site - The EFS web site provides links to additional EFS support resources. The EFS web site is accessible at www.USPTO.gov/ebc/efs/index.html.

Contact the EBC Customer Service Center - 703-305-3028 or toll free at 1-866-217-9197 from 6 AM to 12 midnight Eastern Time Monday to Friday or send an e-mail to ebc@uspto.gov.

Contact the USPTO Patent Assistance Center (PAC) - **1-800-PTO-9199**.

ASSIGNMENTS

Assignments: At a Glance

In order to file a new utility electronically in ePAVE, users must complete certain steps.

Although users may navigate freely throughout ePAVE without following any set order, the steps and screens listed below follow the natural progression of ePAVE, as if the user were to select the *Next* button at the bottom of each screen.

STEP 1: Install and Launch ePAVE

STEP 2: Create a Submission Action and Submission Folder

STEP 3: Provide Data Within the Assignment Module

- **Add Common Data Elements Screen**
- **Assignments Screen**
- **Fee Calculation Screen**
- **Method of Payment Screen**
- **Attach Files to the Project Screen**
- **Validate the Project Screen**
- **Submit to the USPTO Screen**
- **Obtain Acknowledgment Receipt Screen**

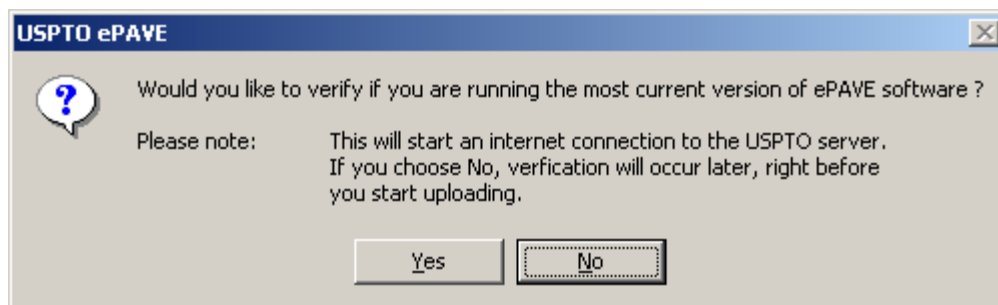
Install and Launch ePAVE

- Obtain ePAVE 5.1d by downloading the software from uspto.gov or by calling the patents Electronic Business Center toll-free at 1-866-217-9197 and requesting the software on a compact disk.
- Install ePAVE 5.1d. This will create an icon on the desktop.
- Highlight the ePAVE 5.1d icon on the desktop and launch the program by either double-clicking on the icon or pressing **Enter** on the keyboard. This will launch the ePAVE 5.1d splash screen.



ePAVE Splash Screen

- Select the **Next** button to proceed. Select the **Cancel** button to exit ePAVE. Select the **Help** button for information about ePAVE.
- Selecting the **Next** button will launch a dialogue box that allows verification that the most current version of ePAVE is running.

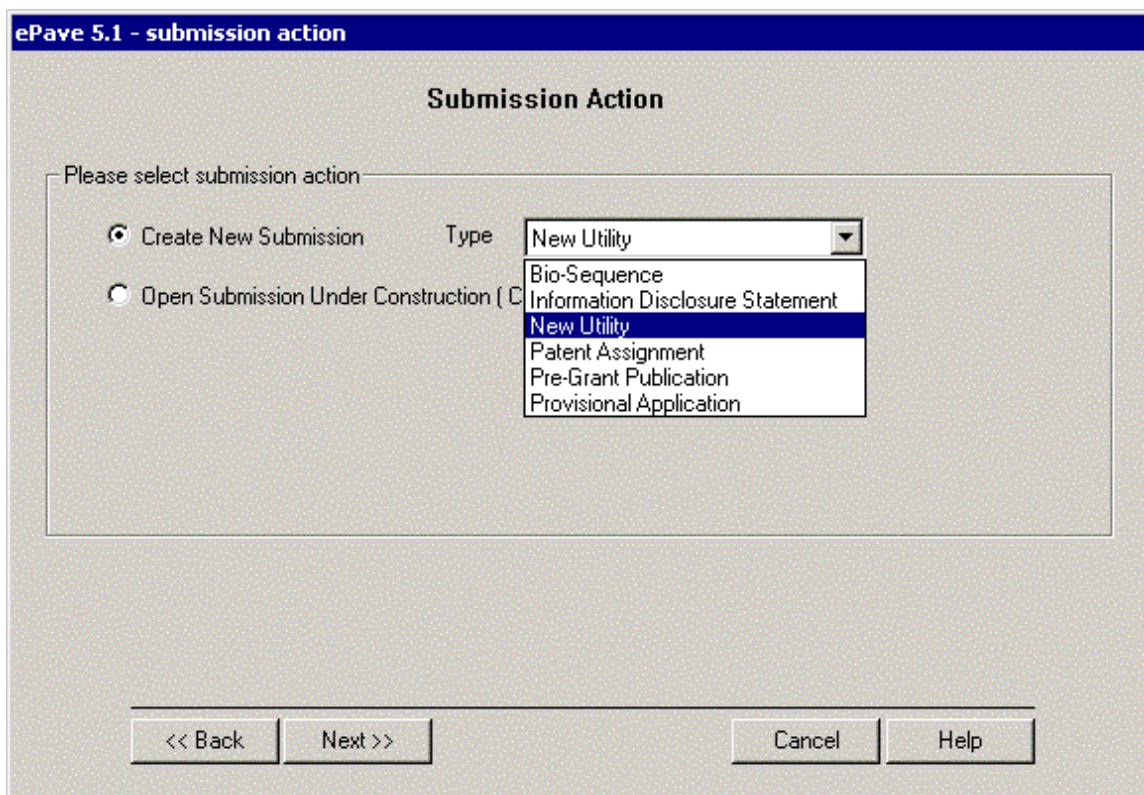


Version Verification dialogue box

- Select **Yes** to verify that the most current version of ePAVE is running.
- Select **No** to verify later.

Create a Submission Action and Submission Folder

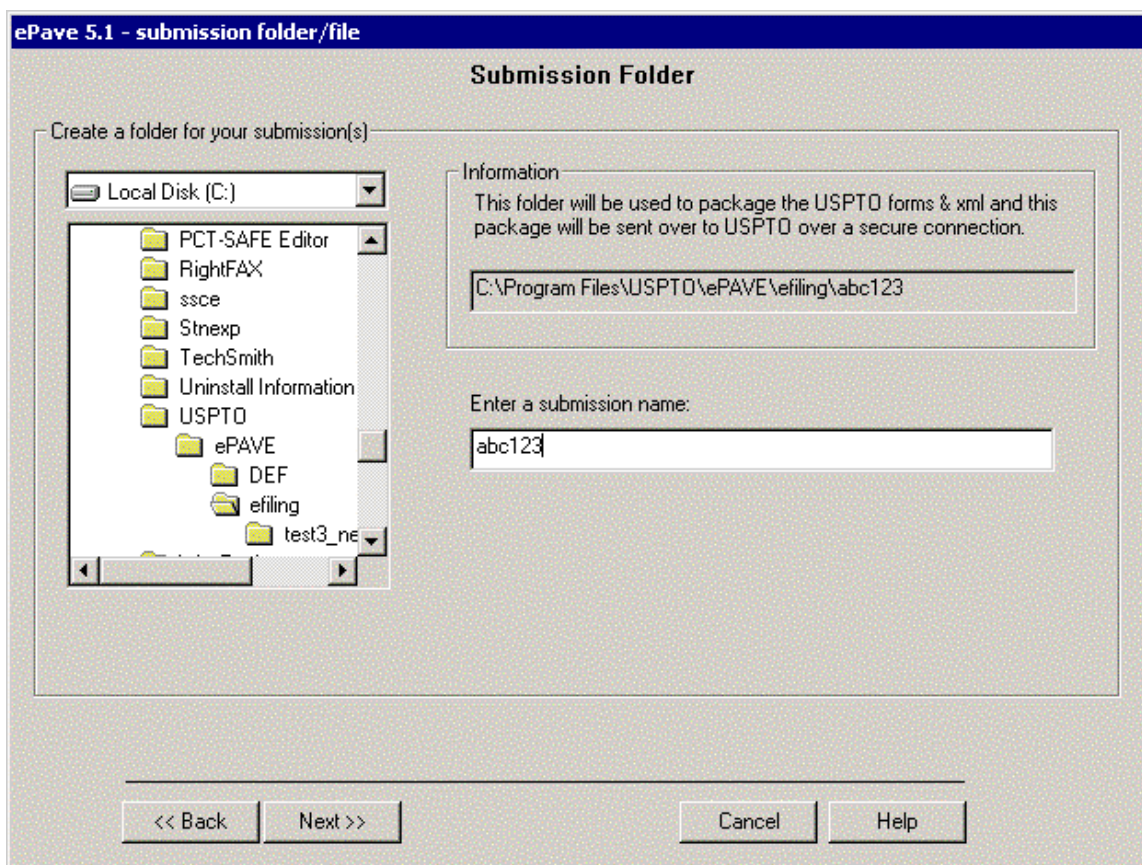
Submission Action Screen



Submission Action Screen

- To create a new submission, select the **Create New Submission** button and choose **Patent Assignment** as the submission type from the drop-down menu.
- Select the **Next** button to proceed to the **Submission Folder** screen. Select the **Cancel** button to exit ePAVE. Select the **Help** button for information about the screen.

Submission Folder Screen



Submission Folder Screen

- If **Next** was selected, the **Submission Folder** screen will be displayed.
- From the drop-down menu select a location for the new submission folder.

Enter a submission name - Enter a name to identify the submission. This will create a submission folder that will store all related documents for the submission. Enter any alphanumeric name without any spaces or special characters. ePAVE will automatically save files for this submission in the submission folder.

Note: Users are required to create a submission folder before working on a submission.

The submission folder may include documents formatted in XML (eXtensible Markup Language) language, such as the transmittal document, a fee document, and an assignment document. This folder may also contain an error log that includes validation errors (if



applicable), the acknowledgment receipt (as proof that the USPTO received the submission), and a zip file that contains the entire submission being sent to the USPTO.

After the first submission folder is created, the next time a new submission folder is created in ePAVE, the directory will default to the directory where the previous submission folder is located.

- Select the **Back** button to return to the **Submission Action** screen. Select the **Next** button to proceed to the **Add Common Data Elements** screen. Select the **Cancel** button to exit ePAVE. Select the **Help** button for information about the screen.

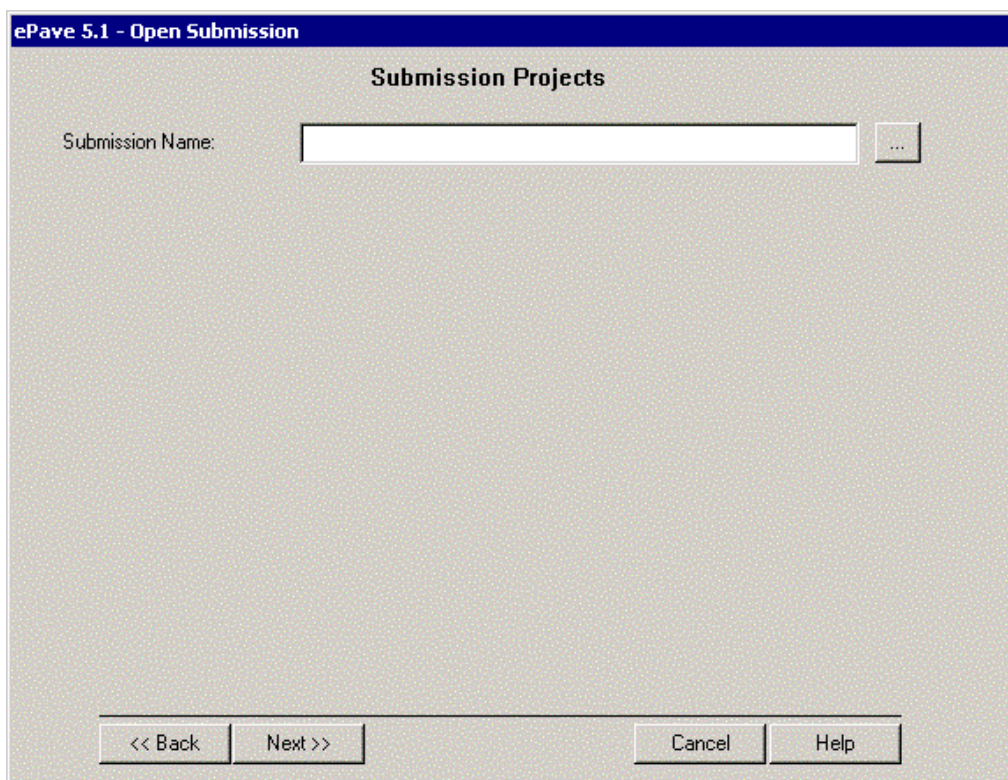
Submission Action Screen

- To edit or modify an existing folder select the **Open Submission Under Construction (Created, not yet submitted)** button.

Submission Action: Open Submission Under Construction

- Select the **Next** button to activate the **Submission Projects** screen.

Submission Projects Screen



ePave 5.1 - Open Submission

Submission Projects

Submission Name: ...

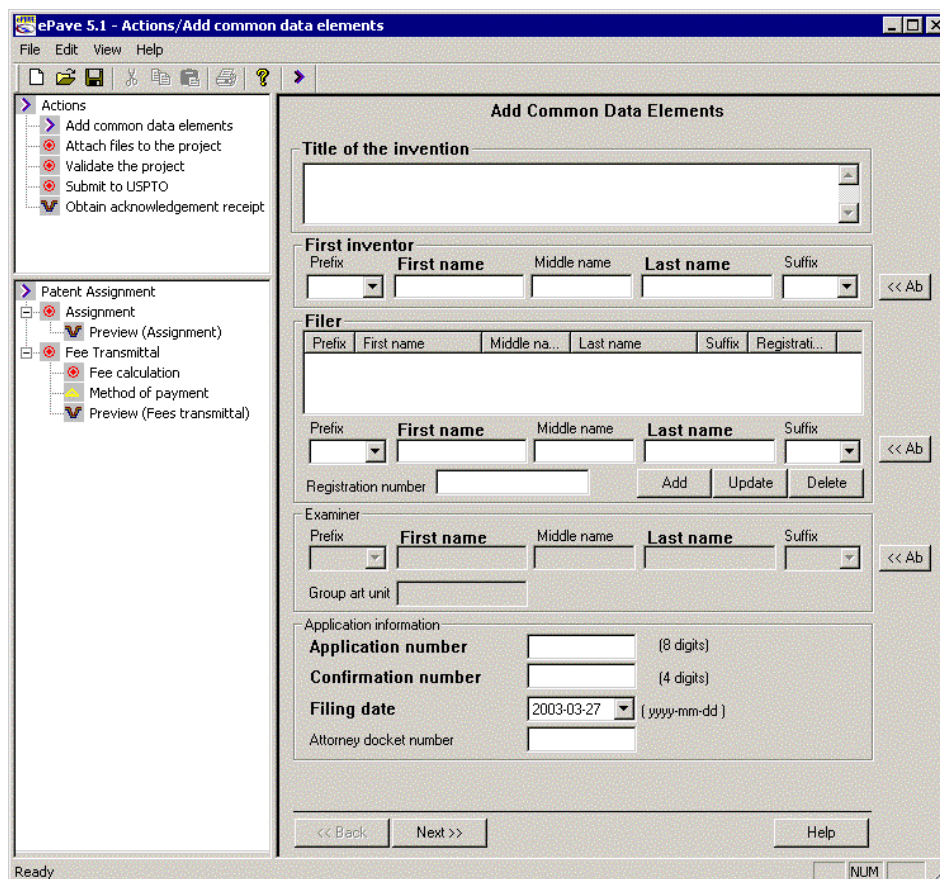
<< Back Next >> Cancel Help

Submission Projects Screen

- Type the folder path and name or select the button labeled . . . which stands for browse to navigate to the folder to be opened.
- Select the **Back** button to return to the *Create a Submission Action* screen. Select the **Next** button to proceed to the *Add Common Data Elements* screen. Select **Cancel** to exit ePAVE. Select **Help** for information about the screen.

Providing Data in the Assignment Module

Add Common Data Elements Screen



Add Common Data Elements Screen

- Enter data that will be used on more than one ePAVE-created form in the data entry boxes.

Title of the Invention - Enter the full title of a patent application associated with this submission. Include all spaces and punctuation. The title may contain a maximum of 500 alphanumeric characters. **REQUIRED.**

First Inventor

- Enter the name of the inventor who is listed first in the declaration of the patent application related to this submission. **REQUIRED.**

Prefix- Enter any name prefix of the first named inventor. Choose the desired prefix from the drop-down menu or type directly into the data field. **OPTIONAL.**

First name - Enter the first or given name of the first named inventor. **REQUIRED.**



Middle name - Enter any middle name of the first named inventor. OPTIONAL.

Last name – Enter the last or family name of the first named inventor. REQUIRED.

Suffix – Enter any name suffix of the first named inventor. OPTIONAL.

All changes to the first inventor name information must be made from the **Add Common Data Elements** screen.

NOTE: Each name should contain a maximum of 50 characters. Characters beyond the 50th will be truncated within USPTO internal automated information systems.

Filer

- Enter the name of the person filing the patent assignment and select the Add button.

Prefix- Enter any name prefix of the filer. Choose the desired prefix from the drop-down menu or type directly into the data field. OPTIONAL.

First name - Enter the first or given name of the filer. REQUIRED.

Middle name – Enter any middle name of the filer. OPTIONAL.

Last name - Enter the last or family name of the filer. REQUIRED.

Suffix – Enter any name suffix of the filer. OPTIONAL.

Registration number – Enter the USPTO registration number of the filer. The USPTO assigns registration numbers to patent attorneys who are registered to practice before the USPTO. Pro se applicants (independent inventors) will not have a registration number and so this field is OPTIONAL.

Add, Update, or Delete information

Select the Add button after entering the filer information. Enter additional filer name information if more than one person is filing the submission.

To edit filer information, select a filer's name from the list. The filer's name will be available in the data entry boxes for editing when the name is selected. Edit the information and select the Update button.

To delete a filer, select the filer's name from the list and select the Delete button.



Examiner

- Enter the name of the examiner assigned or likely to be assigned to the corresponding patent application. OPTIONAL.

Prefix- Enter any name prefix of the examiner. OPTIONAL.

First name - Enter the first or given name of the examiner. REQUIRED if an examiner is specified.

Middle name – Enter any middle name of the examiner. OPTIONAL.

Last name - Enter the last or family name of the examiner. REQUIRED if an examiner is specified.

Suffix – Enter any name suffix of the examiner. OPTIONAL.

Group Art Unit – Enter the Examiner's group art unit. OPTIONAL.

Application number

- Enter a patent application number related to this assignment.

Confirmation number

- Enter the confirmation number of the patent application.

Filing Date

- Enter the actual filing date of the patent application.

Attorney Docket Number

- Enter a reference number of up to 25 characters that is used to identify the patent application. This number is not assigned by the USPTO and can be any combination of numbers and letters. OPTIONAL.
- Select the **Next** button to proceed to the Assignment screen. Select the **Help** button for information about this screen.

Assignment Screens

Helpful information about assignment recordation

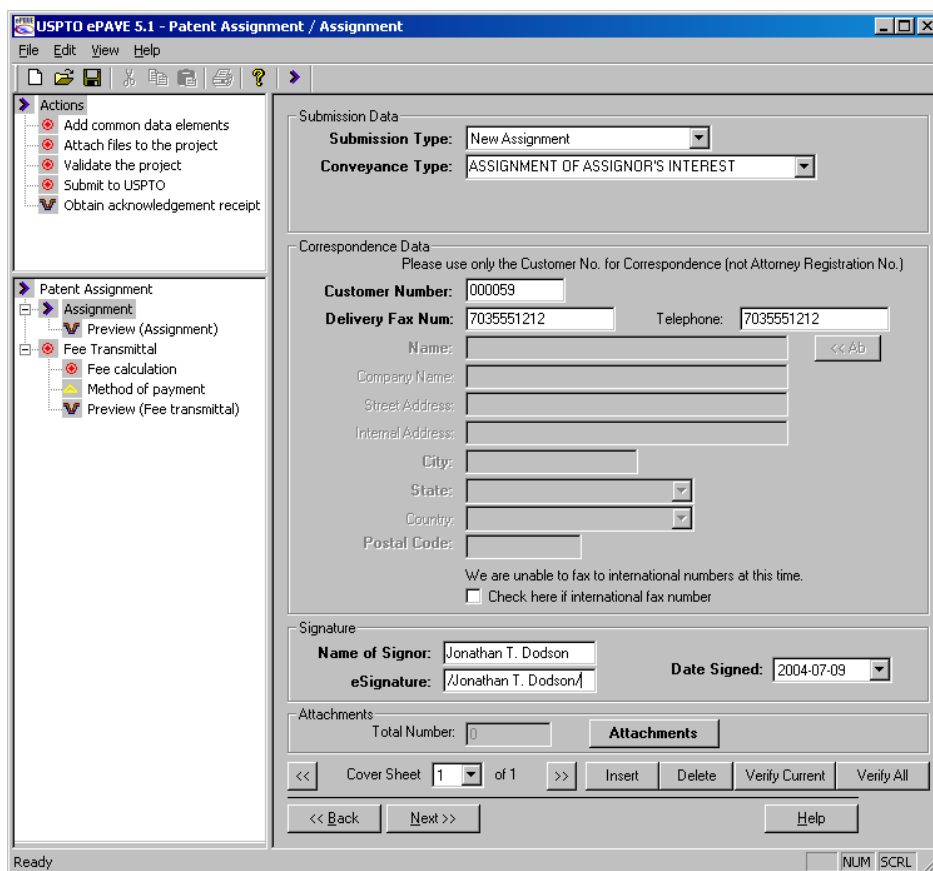
To record an assignment in the USPTO, specific information is required. The data elements required on the Assignment Recordation Cover sheet, Form 1595, that is used in paper and fax filings are also required in electronic filings.

In order to comply with the Government Paper Elimination Act, delivery of the completed assignment form via fax is the preferred method to communicate with the correspondent. The default delivery method is by fax and requires a fax number to be entered in the appropriate field.

Submitting completed assignment forms to the USPTO via fax delivery is beneficial because this will eliminate possible delays in returning official communications to the correspondent. It will also provide faster turn-around processing.

If assignments are filed electronically, the Assignment Services Division in the Office of Public Records, the main office in the USPTO that handles assignments, will not modify your electronic data, with the exception of modifying the customer number for the correspondence address.

Creating Assignment Coversheets



Assignment Screen; Submission and Correspondence Data



- Select *New Assignment* from the *Submission Type* drop-down list.
- Select a *Conveyance Type* from the drop-down list or type the conveyance type into the data field. Enter the desired conveyance type in free form if the assignment transaction is not a standard conveyance type and is not in the drop-down menu. REQUIRED if submission data is entered.
- Enter *Correspondence Data*. Provide the name and address of the correspondent or correspondents (persons or companies) to whom the USPTO should direct official communications pertaining to this assignment filing. Enter a customer number or enter the full correspondence name and address. Entering data in the *Customer Number* data entry box will disable the Correspondence name and address data entry boxes and vice versa.

Customer Number – Enter the USPTO provided customer number in the data entry box. If the customer number is less than 6 digits, zeroes will be added to the front of the customer number to make it a 6-digit number. REQUIRED unless full correspondence name and address is entered.

Note: During the examination processing of the assignment, the Office of Public Records will electronically retrieve the official address associated with the customer number. Characters are not allowed in this field.

Delivery Fax Number – Enter the fax number of the correspondent. Notice of assignment recordation or non-recordation will be returned to this fax number. Please enter a dedicated fax number. Numbers that are associated with PBX equipment, a switchboard or answering machine telephone lines will cause the fax transmission to fail. REQUIRED.

NOTE: Faxing to an international telephone number is not permitted at this time. This field is limited to 12 characters.

Telephone – Enter the telephone number, including area code, of the correspondent. OPTIONAL.

Name – Enter the name of the correspondent. REQUIRED if full correspondence name and address is entered.

Company Name – Enter the name of the correspondent (company) to whom the USPTO should direct official communications. OPTIONAL.

Street Address – Enter the street address of the correspondent. OPTIONAL.



Internal Address – Enter the internal address of the correspondent, such as suite, building name, mail stop, etc. OPTIONAL.

City - Enter the city of the correspondent. REQUIRED if full correspondence name and address is entered.

State - Enter the state of the correspondent. Select a state from the drop-down menu for addresses in the United States or U.S. territories. REQUIRED if the correspondent has a mailing address in the United States or U.S. territories and if full correspondence name and address is entered.

Country – Enter the country of residence of the correspondent. Select a country from the drop-down menu for addresses outside of the United States or U.S. territories. OPTIONAL.

Postal code - Enter the 5 - 9 digit postal code for the correspondent. Entry of a postal code for foreign countries is optional. REQUIRED if the correspondent has a mailing address in the United States or U.S. territories and if full correspondence name and address is entered.

NOTE - Assignment recordation practices allow entry of a state or country, but not both. Selection of one will disable the other. If an entry has been made into one of these fields erroneously, delete the entry in the erred field in order to access the desired field.

Signature

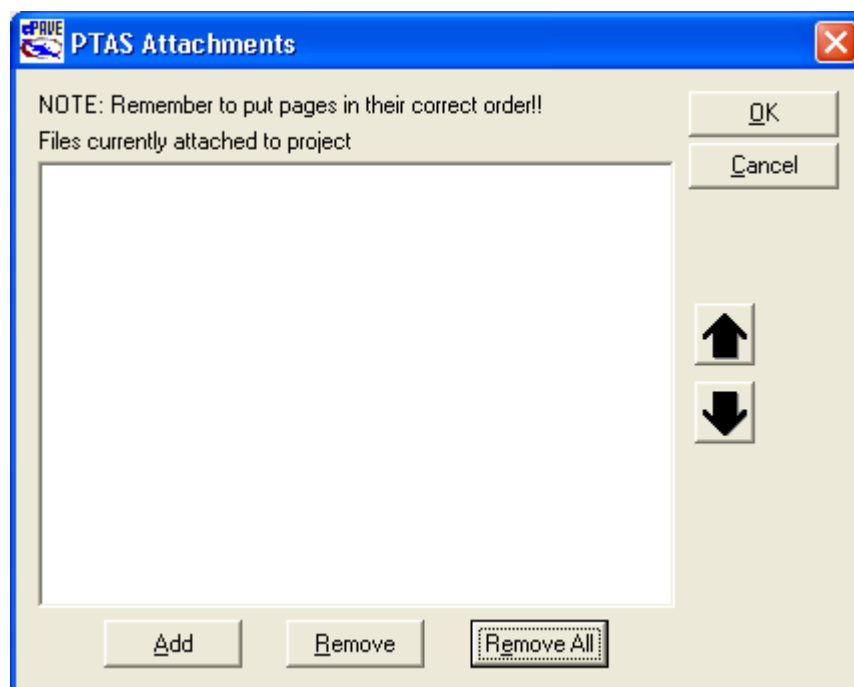
Name of Signor – Enter the name of the person who is electronically signing the submission. This field is limited to 40 characters.

eSignature - Add an electronic signature. The electronic signature is any sequence of alphanumeric characters that represents a signature and should be in the form /firstname lastname/.

Note: This signature is an electronic legal signature. The individual named MUST add a signature.

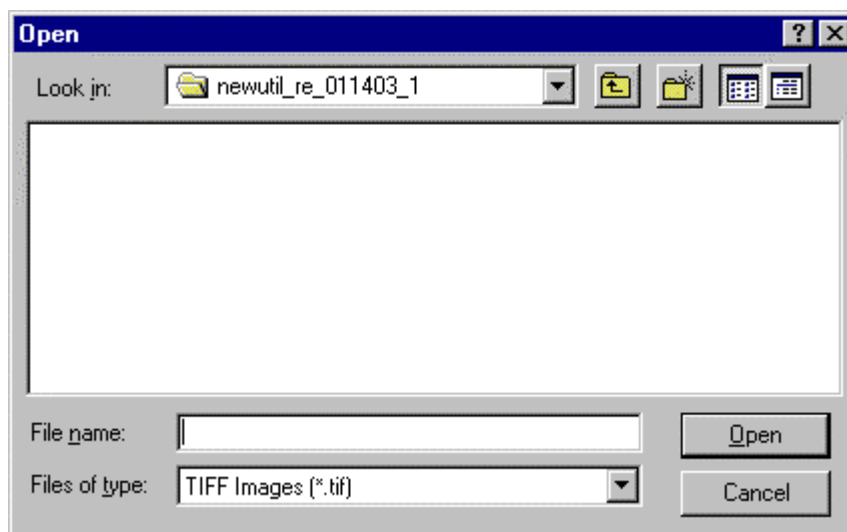
Date Signed - Select the date that the assignment is being signed.

- Select the **Attachments** button - Selecting this will open an attachment box to attach the TIFF images to the assignment. These TIFF images are scanned documents that supports the data entered in the current cover sheet form.



PTAS Attachments Screen

- Select the **Add** button to open the following dialog box, allowing TIFF image to be inserted.

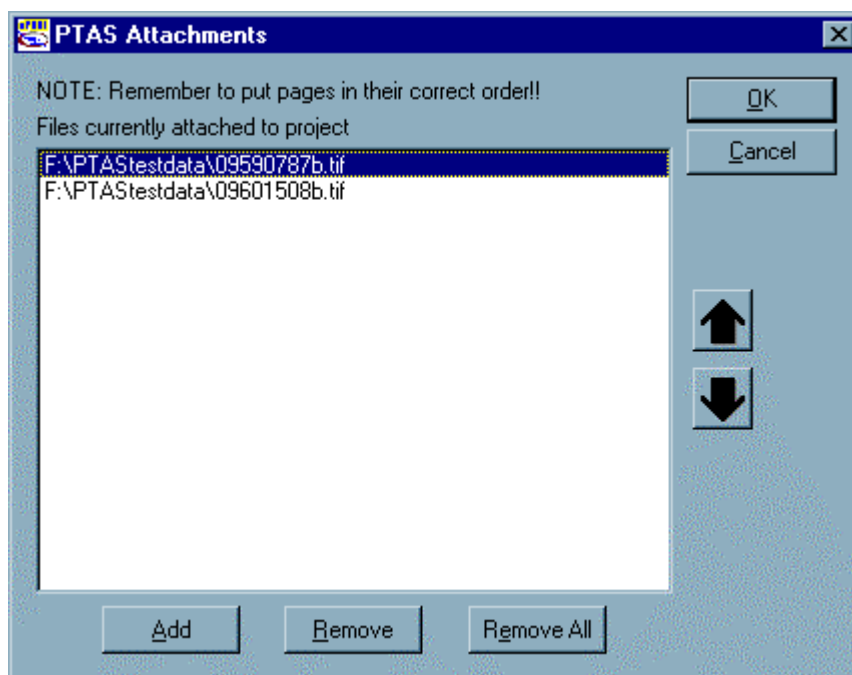


TIFF image look-up

- After locating the image to be added, highlight the image to open it. Repeat this procedure to attach TIFF images as needed.

A legal supporting (conveyance/assignment) document is required to be attached to each authored cover sheet.

- After adding attachments, they may be removed them by highlighting the image to be removed and selecting the **Remove** button. Remove all attached images by selecting the **Remove All** button.



PTAS Attachments Screen

- Use the arrow buttons to place the images in the proper order. Highlight the name of the image and use the up arrow to move it up in order. Use the down arrow to move it down in order. Please ensure that the list of attachments is in the proper page order for this electronic submission. This will ensure proper page order within the microfilm media. The recorded document will be placed on microfilm in the order the document is received. For example, based on the listing shown in the Selection of TIFF Images figure above, the file F:\PTAStestdata\09590787b.tif would become page 1 of the attachment and F:\PTAStestdata\09601508b.tif would become page 2 of the attachment.
- After attaching the images, select the **OK** button to continue.

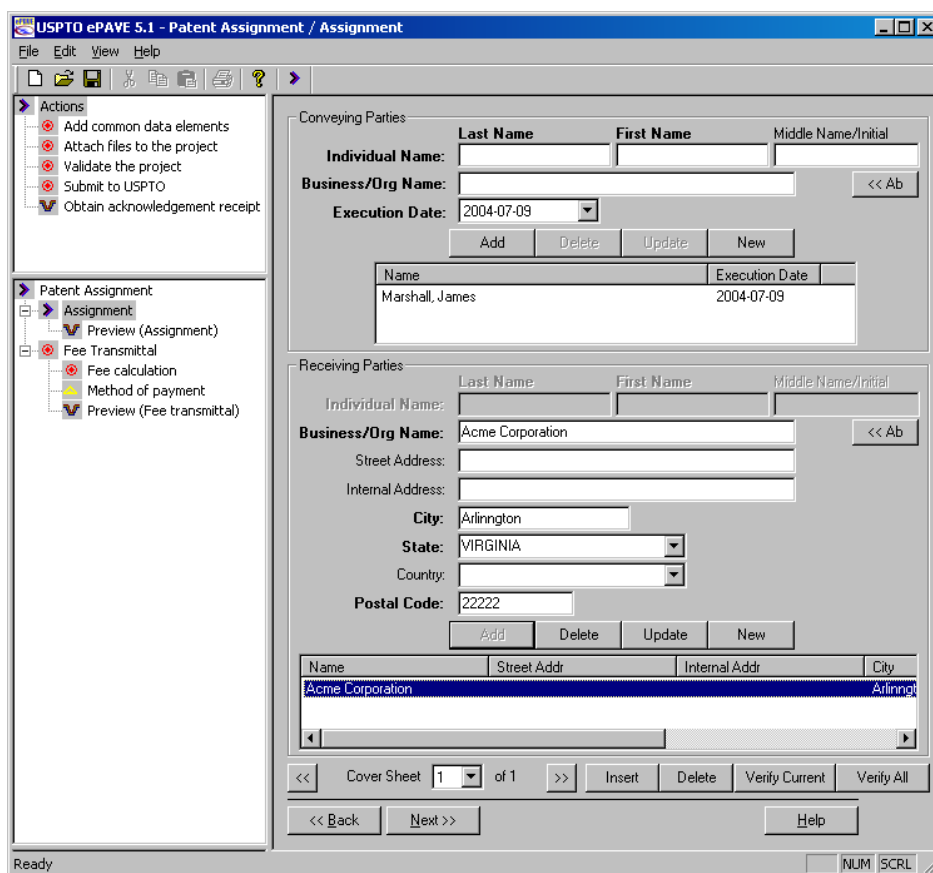
A screenshot of a web form titled 'Attachments'. It contains a label 'Total Number of Attachments:' followed by a text input field containing the number '4'. To the right of the input field is a small button labeled 'Atta'.

Total Number of Attachments

The entry for the total number of attachments is automatically calculated based on the selection of files, and is displayed in the attachment field.

Upon receipt in the Patent and Trademark Office, the electronic XML assignment document and assignment attachments will enter the Patent and Trademark (automated) Assignment System. During PTO pre-processing the assignment XML document is rendered using an XSL Stylesheet. This rendered document is then converted into a TIFF image and merged with the assignment attachments into an electronic folder that contains one assignment cover sheet document (may consist of multiple pages) and one assignment document (pages determined based on attachments). This process allows the electronic assignment submission to be entered directly into the automated Patent and Trademark Assignment System.

- Select the ***Next*** button to go to the second screen in the ***Assignment*** screens.
- Select the ***Back*** button to receive a dialogue box where a desire to exit the Assignments section can be indicated.



Assignment Screen: Conveying and Receiving Parties

Conveying parties

A conveying party may be a person, business, or organization.

- Enter at least one conveying party name and execution date. Enter data in a special format as explained below.

Individual name

Last Name – Enter the last or family name of the conveying party. REQUIRED if the conveying party is a person. This field is limited to 100 characters.

First Name – Enter the first or given name of the conveying party. REQUIRED if the conveying party is a person. This field is limited to 100 characters.

Middle Name/Initial – Enter any middle name or initial of the conveying party. OPTIONAL. This field is limited to 40 characters.



Business/Org name – Enter the name of the business or organization conveying the assignment. REQUIRED if the conveying party is a business or organization. This field is limited to 240 characters.

Execution date - Choose the date when the conveying party executes the assignment document by selecting from the drop-down menu. Dates must be in YYYY-MM-DD format. This date must match the date that appears in the conveyance document that is attached to this submission as a TIFF image. If additional conveying parties are added, the prior date entered is shown. Each part of the date may be selected and changed as appropriate. The execution date may not be greater than the current date. REQUIRED for each conveying party.

NOTE: To facilitate internal search functions in the USPTO, please add data in the *Conveying Parties* section by applying the following format.

Enter regular business entities in a format such as Jones Building Supply.

Enter business entities beginning with 'The' in a format such as Hartley Candy Company, The.

Enter schools, colleges, and universities in a format such as Maryland, University of, The or California, University of, The Board of Trustees.

Enter government agencies in a format such as Energy, U.S. Department of.

Enter government organizations in a format such as Army, United States of America as represented by the Secretary of the Army.



**Add, Update,
or Delete
information**

Select the **Add** button after entering the conveying parties information.

To edit conveying parties information, select a conveying party's name from the list. The conveying party's name will be available in the data entry boxes for editing when the name is selected. Edit the information and select the **Update** button.

To delete a conveying party, select the conveying party's name from the list and select the **Delete** button.

- Select the **New** button to add new conveying parties information.

Receiving parties

A receiving party may be a person, business, or organization. Enter at least one receiving party name and address.

- Enter data in a special format as explained below.

Individual name

Last Name – Enter the last or family name of the receiving party if the receiving party is a person. **REQUIRED** if the receiving party is a person.

First Name – Enter the first or given name of the receiving party if the receiving party is a person. **REQUIRED** if the receiving party is a person.

Middle Name/Initial – Enter any middle name or initial of the receiving party. **OPTIONAL**.

Business/Org name – Enter the name of the business or organization that the property is being assigned to. **REQUIRED** if the receiving party is a business or organization.

Street Address – Enter the street address of the receiving party. **OPTIONAL**.

Internal Address – Enter the internal address of the receiving party, such as suite, building name, mail stop, etc. **OPTIONAL**.

City - Enter the city of the receiving party. **REQUIRED**.

State - Enter the state of the receiving party. Select a state from the drop-down menu for addresses in the United States or U.S. territories. **REQUIRED** if the receiving party has a mailing address in the United States or U.S. territories.



Country – Enter the country of residence of the receiving party. Select a country from the drop-down menu for addresses outside of the United States or U.S. territories. OPTIONAL.

Postal code - Enter the 5 - 9 digit postal code for the receiving party. Entry of a postal code for foreign countries is optional. REQUIRED if the receiving party has a mailing address in the United States or U.S. territories.

NOTE - Assignment recordation practices allow entry of a state or country, but not both. Selection of one will disable the other. If an entry has been made into one of these fields erroneously, delete the entry in the erred field in order to access the desired field.

NOTE: To facilitate internal search functions in the USPTO, please add data in the *Receiving Parties* section by applying the following format.

Enter regular business entities in a format such as Jones Building Supply.

Enter business entities beginning with ‘The’ in a format such as Hartley Candy Company, The.

Enter schools, colleges, and universities in a format such as Maryland, University of, The or California, University of, The Board of Trustees.

Enter government agencies in a format such as Energy, U.S. Department of.

Enter government organizations in a format such as Army, United States of America as represented by the Secretary of the Army.

**Add, Update,
or Delete
information**

Select the **Add** button after entering the receiving parties information.

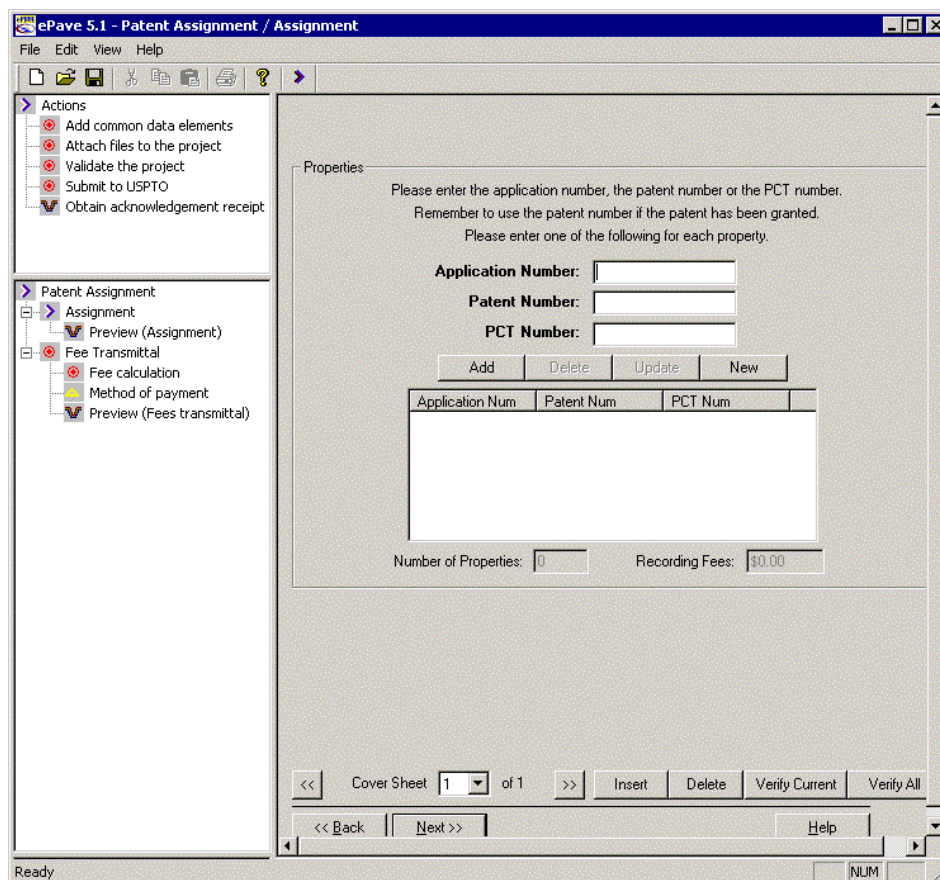
To edit receiving parties information, select a receiving party’s name from the list. The receiving party’s name will be available in the data entry boxes for editing when the name is selected. Edit the information and select the **Update** button.

To delete a receiving party, select the receiving party’s name from the list and select the **Delete** button.

- Select the **New** button to add new receiving parties information.
- Select the **Next** button to enter the application, patent, or PCT number associated with this cover sheet. Select the **Back** button to return to the first assignment screen. Select **Help** for information about the screen.

Properties Screen

When the *Next* button is selected the *Properties* screen is displayed.



Properties Screen

- Enter the number of the first property associated with this cover sheet.

An *Application Number* must be 8 digits.

A *Patent Number* must be 7 or 8 characters with the first two and last alphanumeric and all others numeric.

A *PCT Number* should be 9 alphanumeric characters.

- Select the *Add* button.
- Repeat for each property associated with this cover sheet.

**Add, Update,
or Delete
information**

Select the **Add** button after entering the property information.

To edit property information, select a property number from the list. The property number will be available in the data entry boxes for editing when the property number is selected. Edit the information and select the **Update** button.

To delete a property number, select the property number from the list and select the **Delete** button.

Validating Required Data Elements

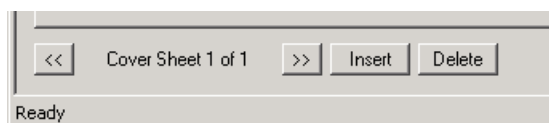
It is essential to provide required data elements in order to record the assignment. To ensure that all required data elements have been entered, validation routines are provided. Validation routines occur automatically as cover sheets are navigated after exiting the second screen in the **Assignments** screen and saving the assignment file.

A message will be displayed only if a cover sheet lacks any required data. Validation routines may be executed by selecting the **Verify Current** or **Verify All** buttons.

- Select the **Verify Current** button to validate the contents of the cover sheet that is currently being worked on.
- Select the **Verify All** button to validate the contents of all cover sheets.

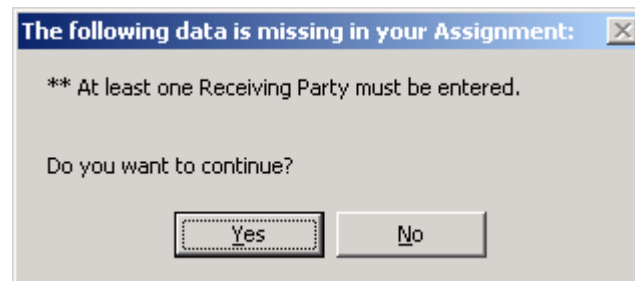
Navigating within Multiple Cover Sheets

- To navigate within cover sheets, select the button marked << with double left arrows to return the previous cover sheet or the button marked >> with double right arrows to go to the next cover sheet.
- Select the **Insert** button to insert additional cover sheets. A maximum of 15 cover sheets may be included in an assignment submission.
- Select the **Delete** button to delete cover sheets before submitting the transmission to the USPTO.



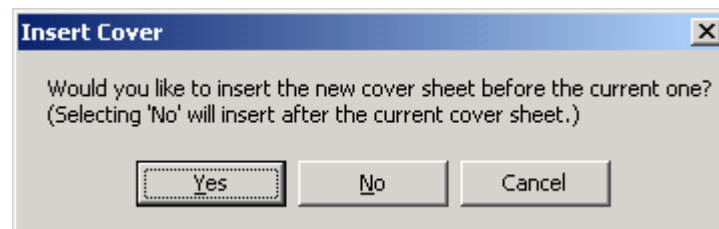
Close-up of cover sheet toolbar

- If the validation routines identify data that is missing from the current cover sheet, a message is displayed with detailed information about which required data elements are missing.



Example of missing information message in assignment cover sheets

- Select the **Yes** button to continue or the **No** button to return to the current cover sheet to correct the error.
- Select the **Insert** button on the cover sheet toolbar to create additional cover sheets or to insert a new cover sheet between two existing cover sheets.
- After selecting the **Insert** button, a dialogue box is displayed indicating that the new cover sheet may be insert before or after the current cover sheet.

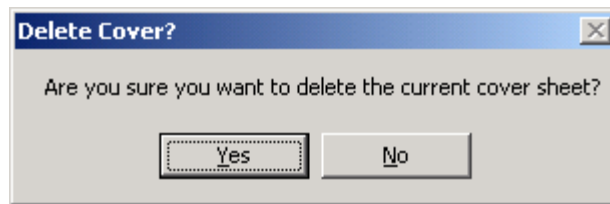


Example of inserting cover sheet message in assignment screen

- Select the **Yes** button to insert the new cover sheet before the current cover sheet.
- Select the **No** button to insert the new cover sheet after the current cover sheet.
- Select the **Cancel** button to return to the current cover sheet.

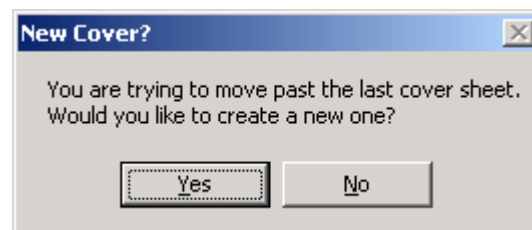
Deleting Cover Sheets

- Select the **Delete** button on the cover sheet toolbar to remove the current cover sheet from the batch of cover sheets in this assignment filing. After selecting the **Delete** button, a dialogue box is displayed where the delete request can be confirmed or rejected.



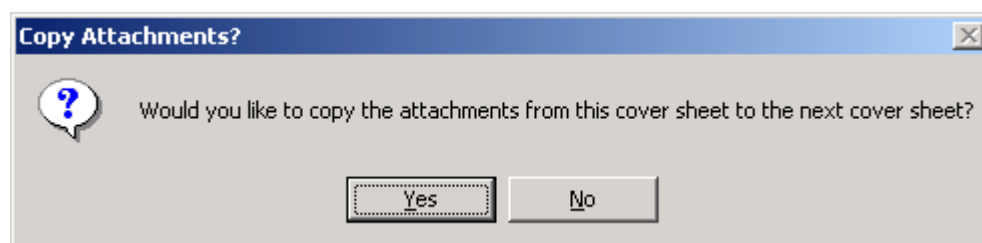
Example of inserting cover sheet message in assignment Screen

- Select the **Yes** button to delete the current cover sheet and continue.
- Select the **No** button to cancel the delete request and return to the current cover sheet.
- Select the button marked << with double left arrows on the cover sheet toolbar to return the previous cover sheet or the button marked >> with double right arrows to go to the next cover sheet.
- When working on the last cover sheet and the button marked >> with right arrows is selected to go to the next cover sheet, a dialogue box is displayed to determine if an additional assignment cover sheet should be created.



Example of creating cover sheet message in assignment Screen

- Select the **Yes** button to create an additional cover sheet.
- Select the **No** button to return to the current cover sheet.
- Select the **Yes** button to create a new cover sheet and the current cover sheet has attachments, a dialogue box is displayed to confirm whether the attachments from the current cover sheet should be copied to the new cover sheet.



Example of copy attachments in cover sheet message in assignment Screen

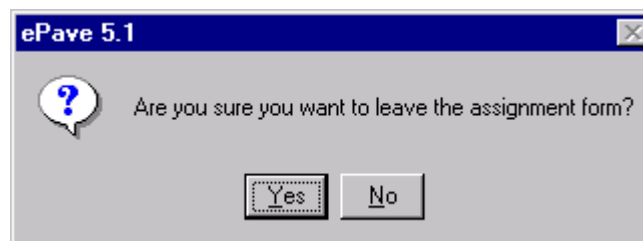
- Select the **Yes** button to copy the attachments from the current cover sheet to the new cover sheet. The attached TIFF images in the current cover sheet will automatically be referenced and attached to the new cover sheet. If the same filename is attached in multiple cover sheets (consecutive or non-consecutive), the file will only be attached to the final submission package.
- Select the **No** button to include other attachments in the new cover sheet.

The identification of the attachments inside the cover sheet is only a reference. ePAVE will not allow duplicate filenames to be attached to the electronic package.

If the USPTO receives an assignment submission package including an XML file of the attachments and the XML file contains one or more references to the same filename, internal procedures will automatically generate the printing of one or more copies of the cover sheets. The printed copies of the cover sheets will be attached to the TIFF image of the conveyance document based on the references contained within each cover sheet.

- Select the **Back** button in the first assignment screen to receive a dialogue box where a desire to exit the Assignments section can be indicated. Select the **Back** button in the second assignment screen to return to the first assignment screen.
- Select the **Next** button in the first assignment screen to proceed to the second assignment screen. Select the **Next** button in the second assignment to proceed to the **Properties** screen. Select the **Help** button for information about the screen.

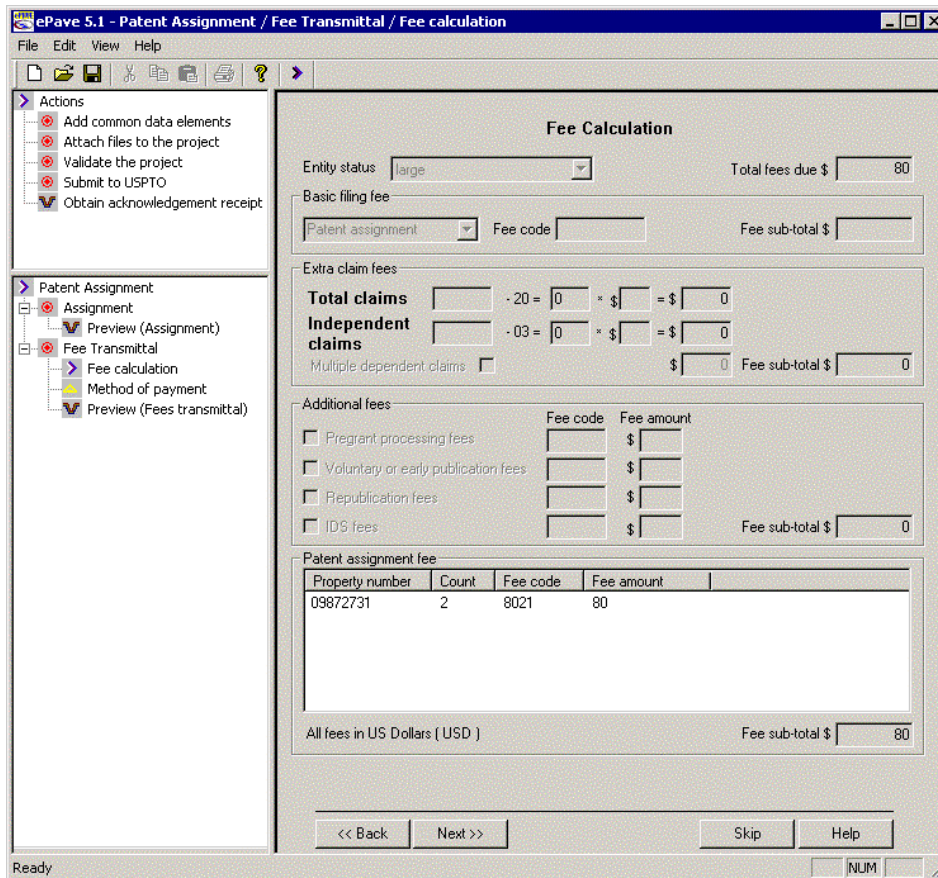
Selecting the **Next** button in the **Properties** screen will cause a dialogue box to be displayed to confirm or reject an exit from the assignment form.



EPAVE prompt re: assignments

- Select the **Yes** button to proceed to the **Fee Calculation** screen.
- Select the **No** button to continue working on the assignment forms.

Fee Calculation Screen



Fee Calculation

Entity status: Total fees due \$

Basic filing fee

Patent assignment Fee code Fee sub-total \$

Extra claim fees

Total claims · 20 = × \$ = \$

Independent claims · 03 = × \$ = \$

Multiple dependent claims ☐ \$ Fee sub-total \$

Additional fees

	Fee code	Fee amount
<input type="checkbox"/> Pregrant processing fees	<input type="text"/>	\$ <input type="text"/>
<input type="checkbox"/> Voluntary or early publication fees	<input type="text"/>	\$ <input type="text"/>
<input type="checkbox"/> Republication fees	<input type="text"/>	\$ <input type="text"/>
<input type="checkbox"/> IDS fees	<input type="text"/>	\$ <input type="text"/>
		Fee sub-total \$ <input type="text" value="0"/>

Patent assignment fee

Property number	Count	Fee code	Fee amount
09872731	2	8021	80

All fees in US Dollars (USD) Fee sub-total \$

<< Back Next >> Skip Help

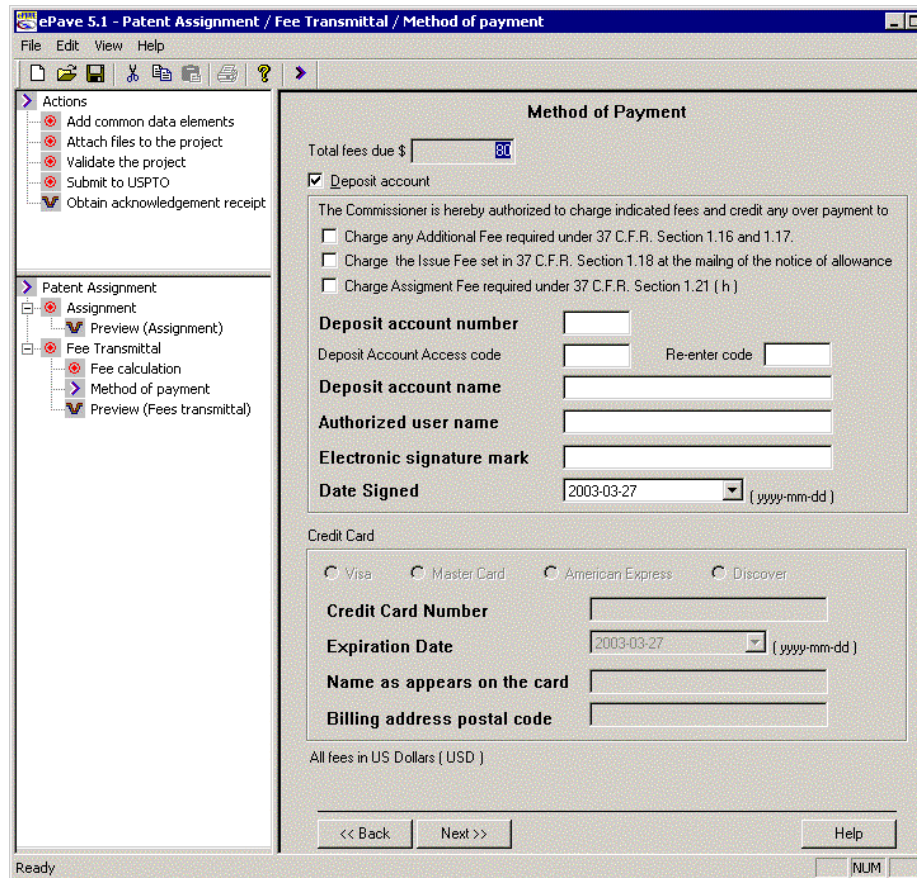
Fee Calculation Screen

- Fee information for the Assignment submission is automatically provided in the **Total fees due** data box.
- Select the **Back** button to return to the first Assignment screen. Select the **Next** button to proceed to the **Method of Payment** screen. Select the **Skip** button to skip the creation of a fee sheet.

Note: A fee transmittal form will not be created if the *Skip* button is selected.

- Select the **Help** button for information about the screen.

Method of Payment Screen



Method of Payment Screen

- The total fees due for this submission are shown in the **Total fees due** data entry box.
- Choose the method of payment. Select either **Deposit account** or **Credit Card**. Selecting the **Deposit Account** button will disable the **Credit Card** button and data fields and vice versa.
- If **Deposit Account** is selected enter deposit account information in the data fields.

Deposit account

If **Deposit account** is selected check box, additional fees may be authorized.

- **Additional fees** – Select this check box to authorize the USPTO to charge additional fees, as set forth in 37 C.F.R. 1.16 or 1.17.
- **Issue fees** – Select this check box to authorize the USPTO to charge issue fees that are due at the time of mailing of a notice of allowance, as set forth in 37 C.F.R. 1.18.



- **Assignment fees** - Select this check box to authorize the USPTO to charge additional assignment fees, as set forth in 37 C.F.R. 1.21(h).
- Enter Deposit account information

Deposit account number - Enter the USPTO-issued deposit account number. REQUIRED.

Deposit Account Access code - Enter the access code associated with the deposit account for automated deposit account processing. Optional unless automated deposit account processing is desired.

Re-enter code - Reenter the access code to ensure that the proper code was initially entered. Optional unless automated deposit account processing is desired.

Deposit account name - Enter the first and last name of the person or entity associated with this USPTO-issued deposit account number. REQUIRED.

Authorized user name - Enter the first and last name of the user authorized to use this USPTO-issued deposit account. REQUIRED.

Electronic signature mark - Enter the electronic signature mark of the authorized user of the USPTO-issued deposit account. The electronic signature is any sequence of alphanumeric characters that represents a signature and should be in the form /firstname lastname/.
REQUIRED.

Note: This signature is an electronic legal signature. The individual named MUST add a signature.

Date Signed - Enter the date that the electronic signature mark is made or select the date from the drop-down menu, which converts into a calendar. REQUIRED.

Credit Card

- If the method of payment selected is credit card, choose the type of credit card used by selecting one of the **Visa**, **Master Card**, **American Express**, or **Discover** check boxes.

Credit Card Number - Enter the credit card number. REQUIRED.

Expiration Date - Enter the expiration date of the credit card. Or, select the date from the drop-down menu, which converts into a calendar. REQUIRED.

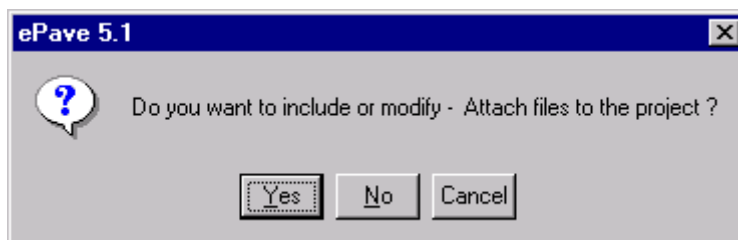


Name as appears on the card – Enter the name provided on the credit card.
REQUIRED.

Billing address postal code – Enter the postal code of the credit card billing address.
REQUIRED.

- Select the ***Back*** button to return to the ***Fee Calculation*** screen. Select the ***Next*** button to proceed to a dialogue box where the option of going to the ***Attach Files to Project*** screen is provided. Select the ***Help*** button for information about the screen.

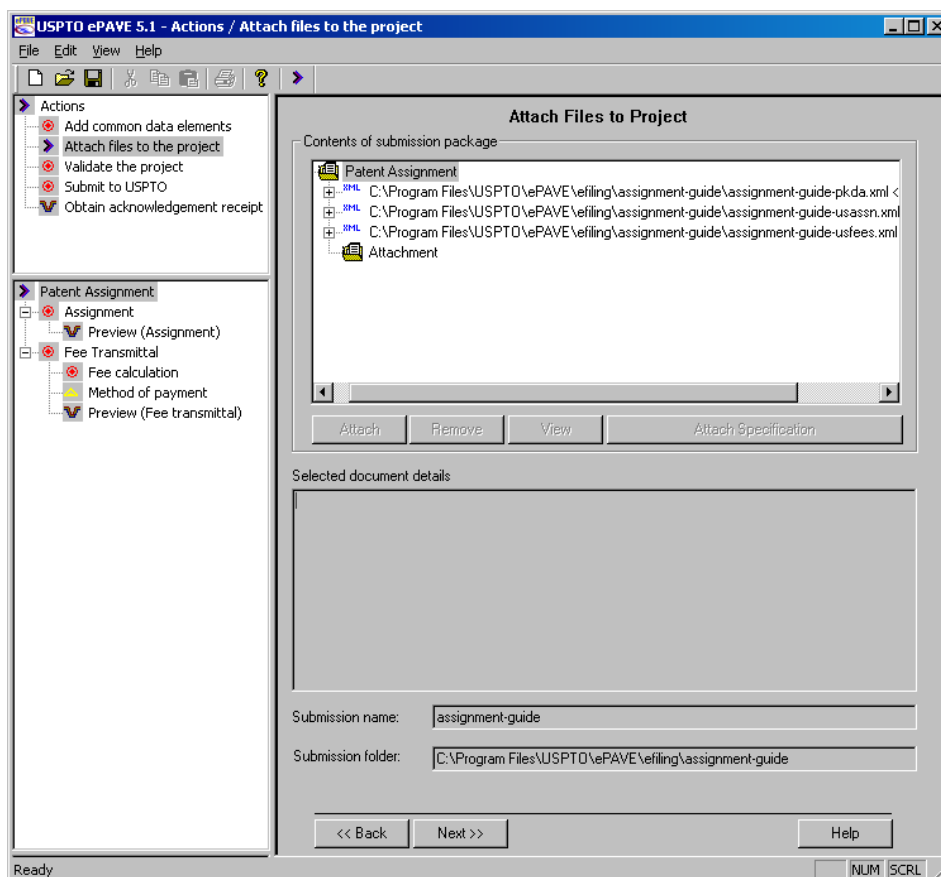
Attach Files to Project Screen



A dialogue box is displayed that allows navigation to the *Attach Files to Project* screen.

- Select **Yes** to go to the *Attach Files to Project* screen.
- Select **No** to go to the *Validate Project* screen.
- Select **Cancel** to remain in the *Method of Payment* screen.

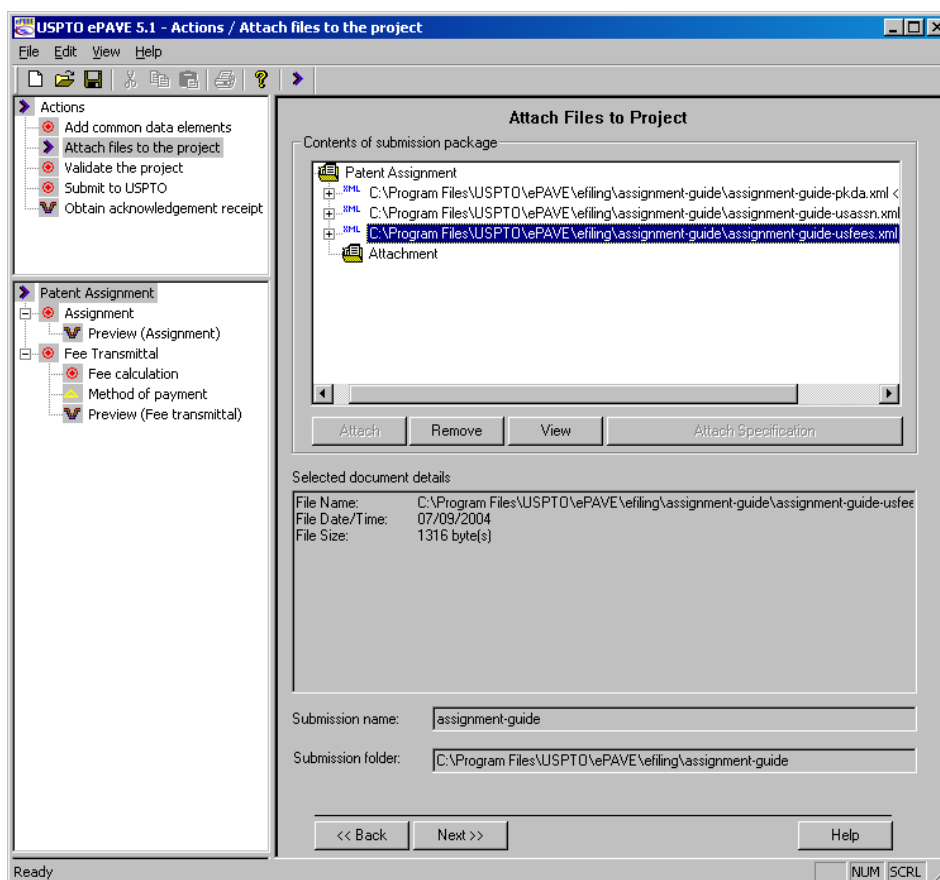
If **Yes** is selected, *Attach Files to Project* screen is displayed.



Attach Files to Project Screen

General Information

Data entered on previous screens is captured and forms are generated in XML format. These forms are automatically attached to the submission and appear in the Attach Files to Project screen. Each XML document will refer to a document type definition file and a stylesheet.



Attach Files to Project: File details

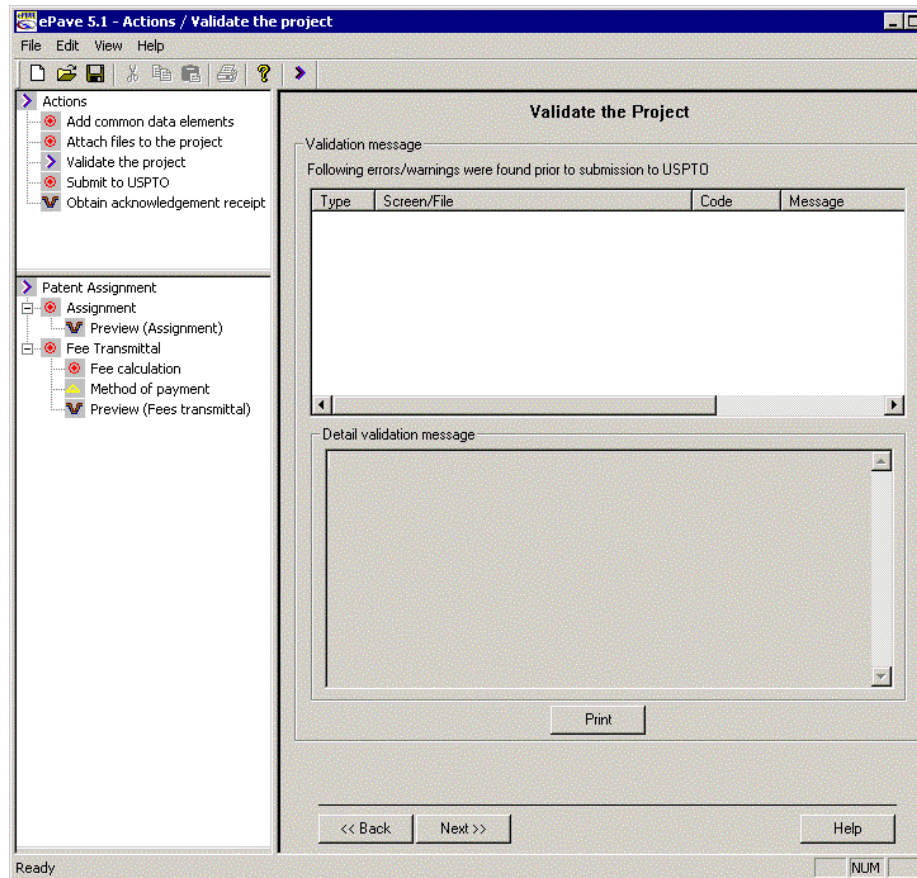
- After files are attached, select and highlight any filename in the **Contents of submission package** listing to view the details of that file, as shown in the **Selected document details** field. The **Selected document details** field shows the file name including the path, file date, file size, and file details for some file types.
- To remove a file, highlight the file in the **Contents of submission package** listing and select the **Remove** button.
- To view a file, highlight the file in the **Contents of submission package** listing and select the **View** button.



Viewing and printing files

- Highlight a file from the *Contents of submission package* listing and select the **View** button. This will launch a browser where the file is displayed using the USPTO stylesheet.
- Print the file by right clicking in the browser and selecting **Print** or by using the keyboard shortcut Ctrl + P.
- Files may also be viewed and printed by selecting the **Preview** option from the Forms tree and selecting the **Print** icon, by selecting the **Print** option from the **File** menu, or by using the keyboard shortcut Ctrl + P.
- Preview the transmittal by selecting **Print Preview** from the **File** menu.
- Select the **Back** button to return to the *Method of Payment* screen. Select the **Next** button to proceed to the *Validate the Project* screen. Select the **Help** button for information about the screen.

Validate the Project Screen



Validate the Project Screen

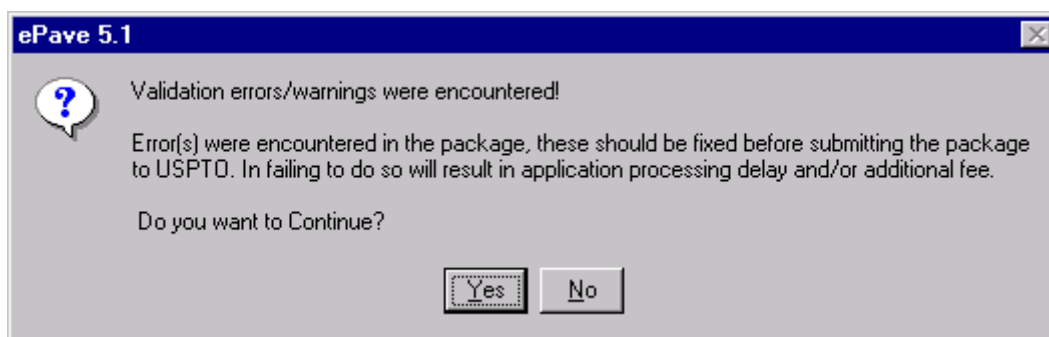
The ***Validate the Project*** screen validates the submission to identify any errors before the submission to the USPTO.

- Verify that an Internet connection is in place. An Internet connection must be in place for validation to occur.
- Validate the submission at any time by selecting the ***Validate the Project*** from the ***Actions tree***.
- View details of any validation errors or warnings by highlighting the error or warning in the ***Validation message*** listing. The Details will appear in the ***Detail validation message*** box.
- Select the ***Print*** button to print a list of current. This will launch a dialogue box requesting permission to print the errors. Select ***Yes*** to print a listing of all errors and warnings and details of the errors. Select ***Cancel*** to return to the ***Validate the Project*** screen.



- Correct the error by following the suggestion listed in the *Detail validation message* field.
- Repeat these steps to correct all errors.
- Select the **Back** button to return to the *Attach Files to Project* screen. Select the **Next** button to proceed to the Submit to USPTO screen. Select the **Help** button for information about the screen.

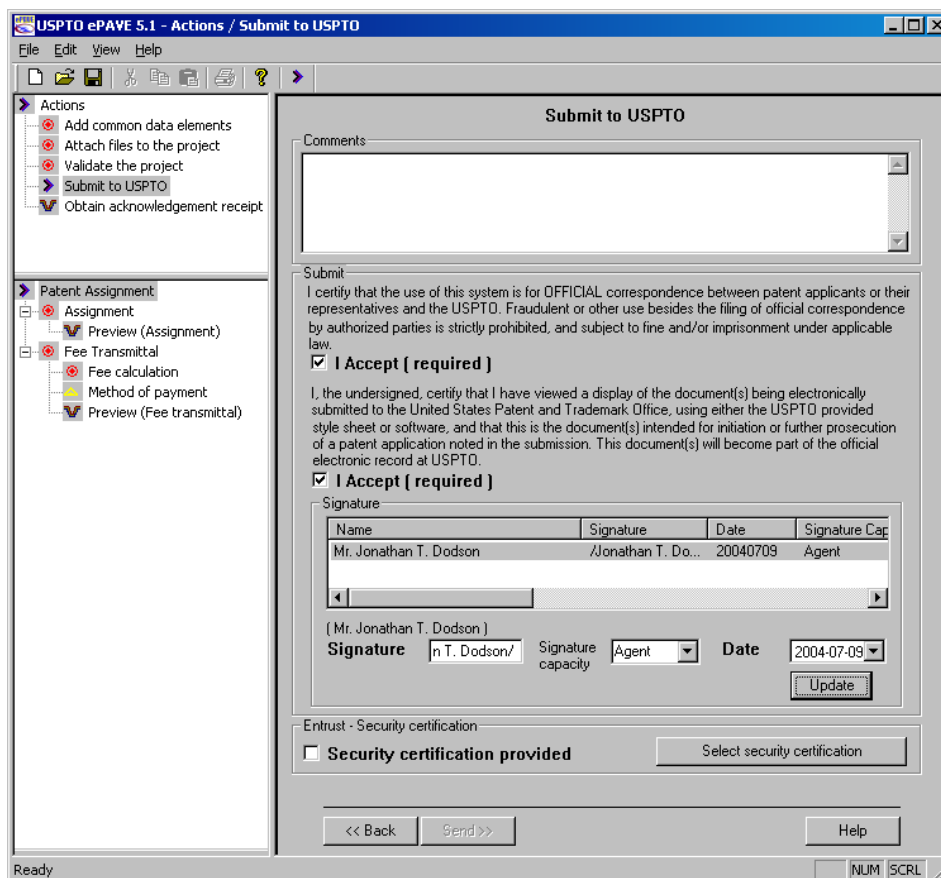
If errors or warning are encountered upon proceeding, a dialogue box will be displayed indicating that errors/warnings have been encountered.



Validation errors/warnings dialogue box

- Select **Yes** to proceed to the *Submit to USPTO* screen. Select **No** to return to the *Validate the Project* screen and correct the errors.

Submit to USPTO Screen



USPTO ePAVE 5.1 - Actions / Submit to USPTO

File Edit View Help

Actions

- Add common data elements
- Attach files to the project
- Validate the project
- Submit to USPTO**
- Obtain acknowledgement receipt

Patent Assignment

- Assignment
 - Preview (Assignment)
- Fee Transmittal
 - Fee calculation
 - Method of payment
 - Preview (Fee transmittal)

Submit to USPTO

Comments

Submit

I certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to fine and/or imprisonment under applicable law.

☒ **I Accept (required)**

I, the undersigned, certify that I have viewed a display of the document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) intended for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at USPTO.

☒ **I Accept (required)**

Signature

Name	Signature	Date	Signature Cap
Mr. Jonathan T. Dodson	/Jonathan T. Do...	20040709	Agent

(Mr. Jonathan T. Dodson)

Signature Signature capacity Date

Entrust - Security certification

☐ **Security certification provided**

<< Back Send >> Help

Ready NUM SCRL

Submit to USPTO Screen

Proceed to the **Submit to USPTO** screen only after fully entering required and optional data in the previous screens, validating the submission, and correcting any errors.

- Enter any comments to be included with the application in the **Comments** data entry box.
- Preview the transmittal by selecting **Print Preview** from the **File** menu.

Required fields and data entry

- Select the two **I accept (required)** check boxes to indicate that the filers who have signed this submission have reviewed it and can attest to its completeness.

Select a particular filer from the **Signature** list. The filer must enter a mark that the filer intends to be an electronic signature in the **Signature** field. The electronic signature is any sequence of alphanumeric characters that represents a signature and should be in the form /firstname lastname/. **REQUIRED.**



Note: This signature is an electronic legal signature. The individual named MUST add a signature.

Signature capacity – Enter the signature capacity of the filer. Or, select the signature capacity from the drop-down menu. **OPTIONAL.**

Date – Enter the date that the submission is being signed. Or, select the date from the drop-down menu, which converts into a calendar. **REQUIRED.**

- Select the **Update** button to update the information.
- Repeat for each filer.
- Select the **Select security certification** this button to locate your USPTO provided Entrust profile. This PKI certificates will establish a secure, encrypted session with the USPTO server for making the submission.

Security Certification Screen

USPTO ePave - Security Certification

In accordance with applicable provisions of PCT Administrative Instructions Part 7, as applied to national and international applications, applicant has the option of filing this provisional or non-provisional application using the built-in "low level" security certificate or the USPTO issued "high level" security certificate.

Low level security certificates require only a verifiable e-mail address of the person submitting the application; however, they may be used only for application submissions, and may not be used for subsequent transactions as they do not provide sufficient authenticity.

High level certificates are preferred for all filings and required for subsequent filings.

☐ Low level security certificate

Email address

High level security certificate

Entrust profile file ... Password

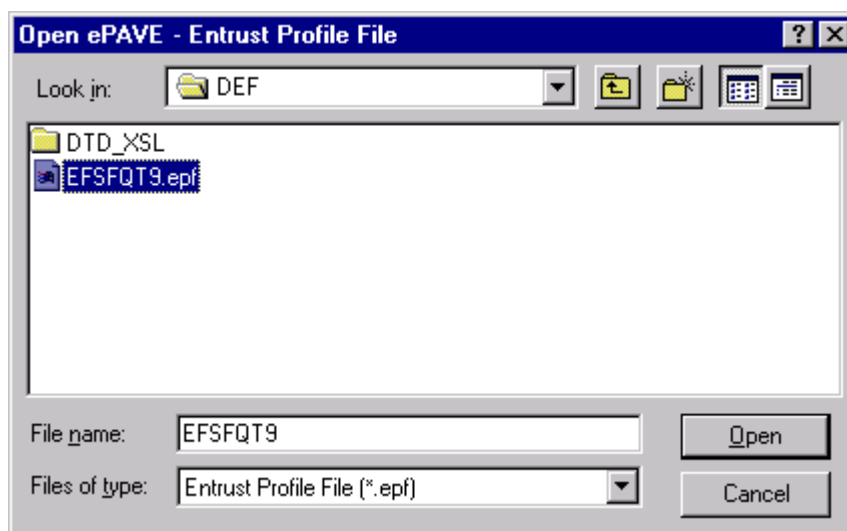
Cancel

Next >>

Help

Security Certification Screen

- Browse to the file location using the button labeled



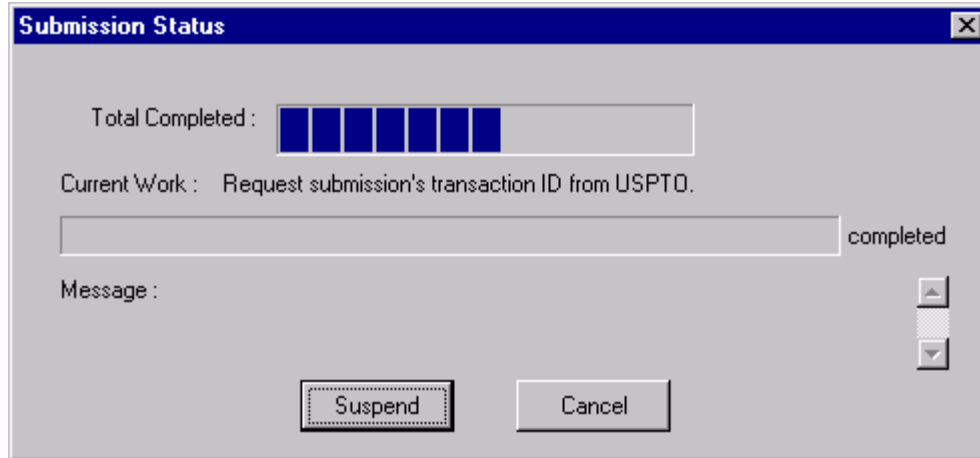
Entrust Profile File look-up

- Select the Entrust profile file (with the extension *.epf) and select the **Open** button or double-click on the profile file.
- Enter the user created Entrust password in the **Password** field.
- Select the **Close** button to return to the Submit to USPTO screen after selecting the desired certificate.
- Upon returning to the Submit to USPTO screen, the **Send** button will be available.
- Select the **Send** button to file the submission to the USPTO server.
- Select the **Back** button to return to the **Validate the Project** screen. Select the **Help** button for information about the screen.

Sending a package to the USPTO

During the submission process, submission status windows are displayed. (Examples appear below.)

The first status window indicates the progress of the submission, the stage the submission has reached, and any messages from the USPTO server.



Submission Status

Total Completed :

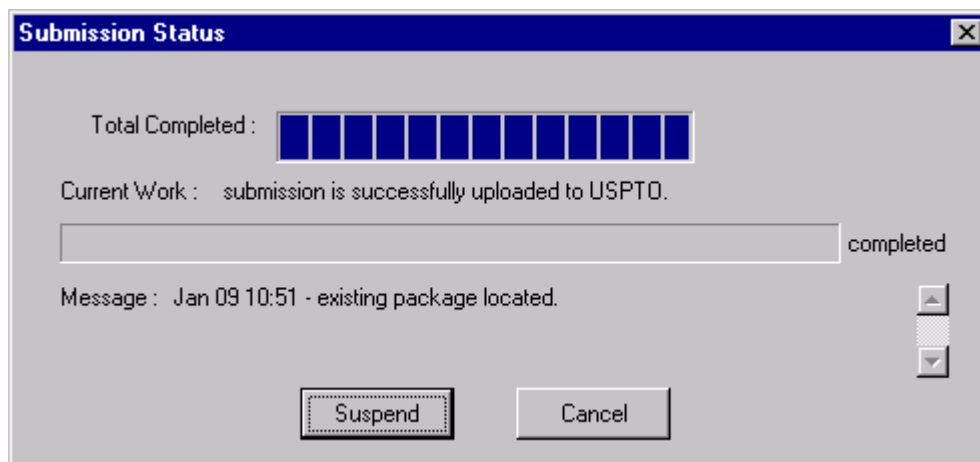
Current Work : Request submission's transaction ID from USPTO.

completed

Message :

Submission Status message

When submission is complete, another status window indicates that the submission was successfully uploaded to the USPTO.



Submission Status

Total Completed :

Current Work : submission is successfully uploaded to USPTO.

completed

Message : Jan 09 10:51 - existing package located.

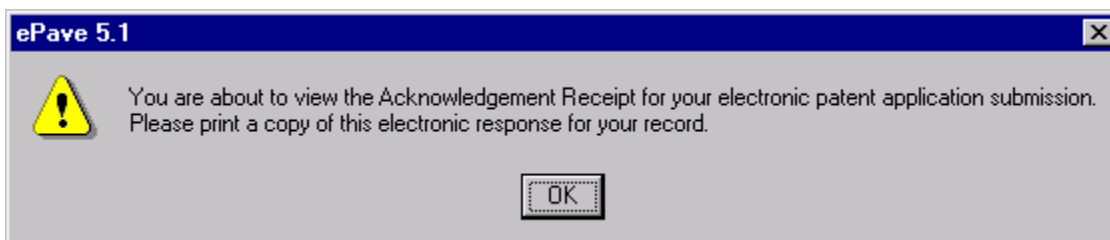
Submission Status message

- Select the ***Suspend*** button on the status window to pause the submission process. Select the ***Cancel*** button to end the submission process.

Obtain Acknowledgment Receipt Screen

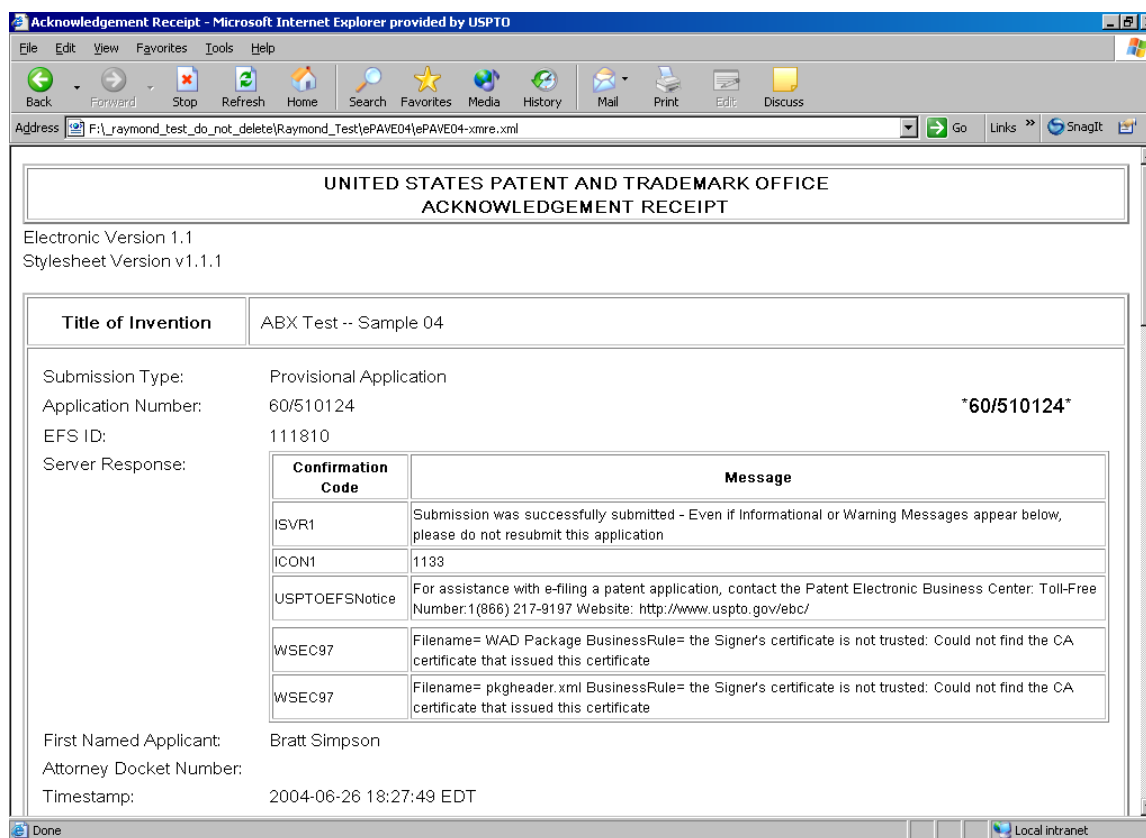
When the submission is complete, the USPTO server will return an acknowledgement receipt.

A dialogue box will be displayed indicating that the Acknowledgement Receipt is ready to be viewed.



Acknowledgement Receipt Notification

- Select the **OK** button to view the acknowledgement receipt.



Acknowledgment receipt: top half

Acknowledgement Receipt - Microsoft Internet Explorer provided by USPTO

Address: F:\raymond_test_do_not_delete\Raymond_Test\ePAVE04\ePAVE04-xmre.xml

Attorney Docket Number:
Timestamp: 2004-06-26 18:27:49 EDT
From: us
File Listing:

Doc. Name	File Name	Size (Bytes)
us-request	ePAVE04-usrequ.xml	1149
us-request	us-request.dtd	19064
us-request	us-request.xsl	33904
us-fee-sheet	ePAVE04-usfees.xml	1128
us-fee-sheet	us-fee-sheet.xsl	24912
us-fee-sheet	us-fee-sheet.dtd	11069
computer-listing	computer_listing1.txt	115020
computer-listing	computer_listing2.txt	115020
application-body	Sample04.xml	17967
application-body	application-body.dtd	49498
application-body	Image1.tif	45223
application-body	Image10.tif	768265
application-body	Image11.tif	820603
application-body	Image12.tif	820603
application-body	Image13.tif	821449
application-body	Image14.tif	821449
application-body	Image15.tif	821449
application-body	Image16.tif	768265
application-body	Image17.tif	768265
application-body	Image18.tif	768265

Done Local intranet

Acknowledgment receipt: bottom half

- Print the acknowledgement receipt by selecting **Print** from the **File** menu, by selecting the **Print** icon on the toolbar, or by using the keyboard shortcut **Ctrl + P**.

After the package has been transmitted successfully, the USPTO server dates and timestamps the package and uses digital signature technology to verify that the contents of the package have not been altered during transit.

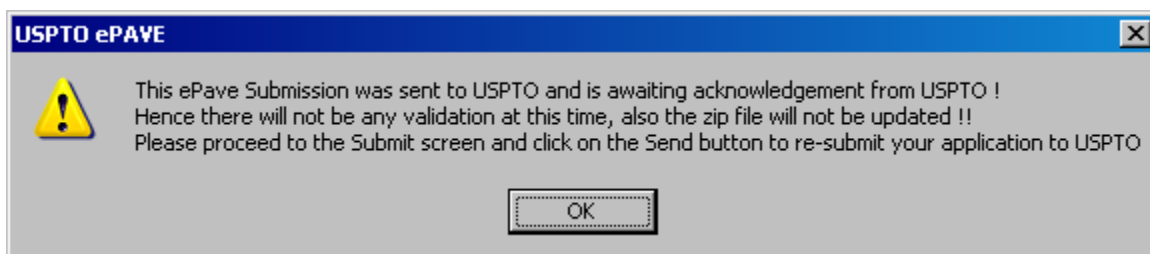
The USPTO server also returns certain information to ePAVE that ePAVE then uses to create the acknowledgement receipt. The acknowledgement receipt will include the application number, confirmation number, a unique EFS transaction ID and the date and time when the USPTO received the submission.

The acknowledgment receipt is returned in real time. It is automatically saved in the same folder as the rest of the submission. The acknowledgment receipt should be printed.

More information about the acknowledgment receipt is available at the EFS Legal Framework, located at the patent Electronic Business Center web site, USPTO.gov/ebc.

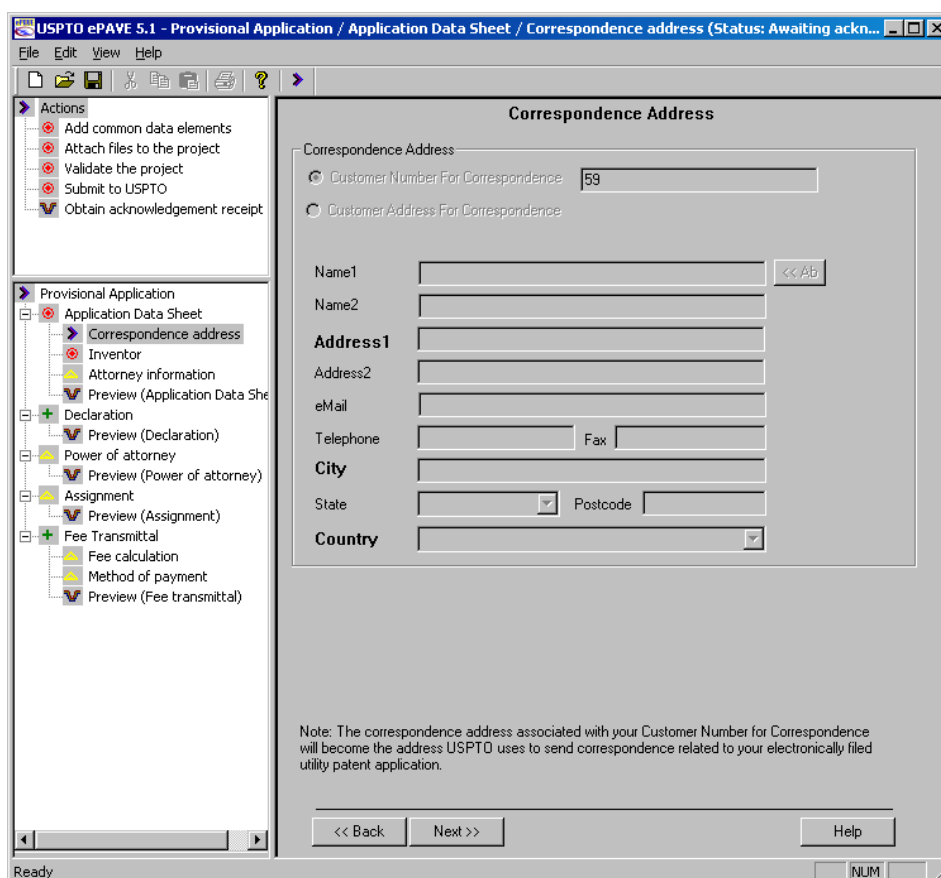
For new utility patent applications, the acknowledgment receipt establishes the date of filing but does not grant an official filing date. An official filing date can only be determined once the USPTO Office of Initial Patent Examination has completed formalities reviews. An official filing receipt will be mailed when the formalities reviews are completed.

After a submission is successfully received on the USPTO server, the submission package will be read only in ePAVE. Users may view the data that was entered and view the parts of the submission, but the data cannot be modified. A message to this effect is displayed.



The USPTO ePAVE Message Screen

The data provided in the submission can be viewed in the various screens, but the fields are grayed and the data cannot be altered.





Correspondence Address Screen with unalterable data

Acknowledgement Receipt

The *Acknowledgement Receipt* contains the following information.

Title of Invention – This field displays the title of the invention contained in this submission.

Submission type - This field shows the type of submission that was received by the USPTO.

Application Number - This field shows the application number that was returned to ePAVE from the EFS server after successful submission of a patent application filing.

EFS ID – This field shows the ID of the EFS server for this submission.

Server Response – These fields display messages being sent from the USPTO EFS server. These messages indicate whether the submission was successful and provide warnings or errors detected by the EFS server.

ICON1 – This is the USPTO assigned confirmation number.

First Named Applicant - This field shows the name of the first named inventor entered in the *Add Common Data Elements* screen.

Attorney Docket Number – This field shows the attorney docket number entered on the *Add Common Data Elements* screen.

Timestamp – This field shows the date and time that the submission was received at the USPTO.

From – This field shows that this submission was for U.S. practice.

File Listing - This field shows an itemized listing of all files that were included in the submission package that was sent to the USPTO. It includes the file size, date produced, and the total submission size.

Message Digest – This field shows a message that is unique to this submission. This digest serves as proof of what was submitted should any question arise in the future.

Digital Certificate Holder Name – This field shows the name of the digital certificate that was used to establish the secure connection with the USPTO server.



Exiting ePAVE or Preparing Another Submission

- Exit ePAVE by selecting ***Exit*** from the ***File*** menu or by selecting the ***X*** icon in the upper right-hand corner of the screen.
- Begin a new submission by selecting ***New*** from the ***File*** menu, by selecting the ***New*** icon from the toolbar, or by using the keyboard shortcut **Ctrl+N**.
- Open another submission under construction by selecting ***Open*** from the ***File*** menu, by selecting the ***Open*** icon from the toolbar, or by using the keyboard shortcut **Ctrl+O**.